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## The Crabroninae Wasps of "Biologiezentrum Linz" - Collection in Linz, Austria (Hymenoptera, Apoidea, Crabronidae), Part 1

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**Abstract:** The Crabroninae wasps of the following genera were examined: *Crabro* FABRICIUS 1775, *Ectemnius* DAHLBOM 1845, *Encopognathus* KOHL 1897, *Enoplolindenius* ROHWER 1911, *Lestica* BILLBERG 1820, *Neodasyproctus* ARNOLD 1926, *Piyuma* PATE 1944, *Piyumoides* LECLERCQ 1963, *Podagritus* SPINOLA 1851, *Rhopalum* STEPHENS 1829, *Tracheliodes* A. MORAWITZ 1866, *Williamsita* PATE 1947.

All information on localities are given, however of common species only localities outside Central Europe are listed.

**Key words:** Apoidea, Sphecidae, Crabronidae, Crabroninae.

### Introduction

Last year I tried to identify a lot of Crabroninae of the Collection of "Biologiezentrum Linz" in Austria. Complete information including the localities and the dates of capture is listed. With widespread and commonly found species the exact localities and dates of capture are listed only if they were found outside of Central Europe. All together 4930 specimens of Crabroninae were examined (1995 ♀♀, 2935 ♂♂).

### Material examined

**Tribe Crabronini LATREILLE 1802**

***Crabro* FABRICIUS 1775 [338 ♀♀, 392 ♂♂]**

***Crabro alpinus* IMHOFF 1863 [10 ♀♀, 7 ♂♂]**

**Austria:** 1♂, Tirol, Kühtai, 3.VIII.1993, leg. Tiefenthaler; 1♂, Sölkpass, 8.VIII.1997.

**Bulgaria:** 9♀♀, 2♂♂, V. Sipka, VII.1969, leg. Deneš; 1♀, Harnsauili, VII.1969, leg. Deneš.

**Romania:** 1♂♂, Banat, Semenik mts., Semenik, 1300m, 7.VII.1995, leg. Kubon; 1♂, Mt. Pagaras Bilka, 1300m, 23.VII.1994, leg. Szekeli.

***Crabro altaicus* F. MORAWITZ 1892 [12 ♀ ♀, 40 ♂ ♂]**

**K a z a k h s t a n - m e r .** : 1 ♀, 4 ♂ ♂, Issik 3 km S, 22.-23.VI.1992, leg. J. Halada; 1 ♂, Alma-Ata Medeo, 27.VI.1995, leg. J. Halada; 2 ♂ ♂, 20 km N Kegen, 43.0°N 79.0°E, 24.V.1994, leg. K. Deneš jr.; 4 ♂ ♂, 20 km SE Aksay env., 16.-19.VI.1992, leg. K. Deneš.

**K i r g i z i y a** : 3 ♀ ♀, 7 ♂ ♂, ash-Arik, 11 km E Talas, 4.VII.1992, leg. M. Halada; 1 ♂, Kizil-kiya, 40.2°N 72.1°E, 15.V.1994, leg. M. Halada; 1 ♂, Ala Bula, 41.5°N 71.2°E, 6.VI.1995, leg. J. Halada; 1 ♀, 5 ♂ ♂, Alai Mt. R. Jkizjak, Kok-Suu riv. bass., VII.2000, leg. Gurko; 2 ♂ ♂, Oshakaya Obl., Distr. Dchon-Alajsky, Alai-Geb., Tal d. Kok-Suu, 39°37'34''N 71°56'36''E GPS, 2700-2800m, 20.-21.VII.1998, leg. H. & R. Rausch; 1 ♂, Dzhalai-Abadskaya Obl., Sandalasch-Geb. über Kuru-Tegerek, 40°02'15''N 71°24'14''E GPS, 2600-2700m, 9.-10.VII.1998, leg. H. & R. Rausch; 1 ♂, Talasskaya Oblast, Talass-Gebirge am Fluss Ara Byik, 42°23'28''N 70°58'34''E GPS, 2050-2150m, 3.VII.1996, leg. H. & R. Rausch; 3 ♂ ♂, Frunse env.(10km), Con Arik, 24.-28.V.1980, leg. Padr; 1 ♂, Ak-Suu riv., Tezskay Alatau Mt., Teplokljuchenska vill., VI.1999, leg. Gurko; 1 ♂, Kuk-kul ozero, Chamza-Abad env., leg. J. Niedl; 2 ♀ ♀, 3 ♂ ♂, Frunse 50 km S Alla Arca, 7.VII.1981, leg. Kocourek; 2 ♀ ♀, Issyk-Kulskaya Obl., S Teploklyochenska, 42°47'N 78°31'E, 2000-2300m, 18.-20.VI.1995, leg. H. & R. Rausch; 1 ♀, Kirgiziya Mts., Ala Archa riv., Kashka-Suu, 1650m, VII.2000, leg. Gurko; 1 ♀, Ferghana Mt. R., Ak-Terek, 1750m, 41°17'N 72°49'E, 22.VII.2000, leg. Makogonova; 2 ♀ ♀, Terskey Alatan Arashan, 28.VIII.1999, leg. Gurko; 1 ♀, Talasskaya Oblast, Talass-Gebirge am Fluss Ara-Byik, 42°21'39''N 70°57'10''E GPS, 2200-2600m, 4.VII.1998, H. & R. Rausch.

**T a d s h i k i s t a n** : 1 ♂, Darvazskij chrebet Tavildara, 1800-2800m, 13.VI.1990, leg. M. & J. Halada.

**U z b e k i s t a n** : 1 ♂, Alai Kuk-kul (Fergana), 1300m, 18.-20.VI.1983, leg. Tkalka; 1 ♂, Fergana env. (30km), Kadamzaj, 21.-22.V.1980, leg. Padr.

***Crabro altaicus* variation:** clypeus and scutellum entirely black.

**M o n g o l i a** : 1 ♀, Ulanbatar, Tuul riv. vall., 12.VII.2003, leg. J. Halada.

***Crabro cribrarius* (LINNAEUS 1758) [149 ♀ ♀, 141 ♂ ♂]**

**R u s s i a n F e d e r a t i o n** : 1 ♀, 1 ♂, Tuvinskaja, Chadya, 1994, leg. Kletecka.

**S p a i n** : 2 ♂ ♂, Soria, 18.VI.1964, leg. Linsenmaier.

**T u r k e y - e a s t** : 1 ♂, 50 km S Kars Pasli, 1.VII.1997, leg. M. Halada.

The remaining specimens come from Austria (8 ♀ ♀, 5 ♂ ♂), Czech Republic (130 ♀ ♀, 108 ♂ ♂), Germany (6 ♀ ♀, 8 ♂ ♂) and Slovakia (6 ♀ ♀, 16 ♂ ♂).

***Crabro filiformis* RADOSZKOWSKI 1877 [3 ♀ ♀, 21 ♂ ♂]**

**K a z a k h s t a n - m e r .** : 1 ♂, Chagir, 42.2°N 68.8°E, 40 km S Aris, 6.V.1994, leg. J. Halada.

**T u r k m e n i a** : 1 ♀, 2 ♂ ♂, Tzemeribit, 12.V.1993, leg. M. Halada; 1 ♀, Bez. Merw, Badchys Naturschutzgebiert, Eroyulanduz, 19.-20.IV.1993, leg. Cate & Dostal.

**U z b e k i s t a n** : 1 ♀, 16 ♂ ♂, Samarkand env., 19.-21.V.1994, leg. M. Halada; 2 ♂ ♂, 5 km w Djizjak; 39.9°N 67.5°E, 23.V.1994, leg. J. Halada.

***Crabro fratellus* KOHL 1915 [2 ♀ ♀]**

**K a z a k h s t a n** : 1 ♀, Lepsi 6km SE, 8.VI.1992, leg. Jirousek; 1 ♀, Lepsi, 46.4°N 78.8°E, 19.-20.VI.1995, leg. J. Halada.

***Crabro jordanicus* GUICHARD 1991 [3 ♀ ♀, 1 ♂]**

S y r i a – w e s t : 3 ♀ ♀, 50 km S of Homs, 24.V.1996, leg. M. Halada.

S y r i a – m e r . – o c c . : 1 ♂, Maalula, 17.V.1995, leg. K. Deneš jun.

***Crabro funestus* KOHL 1915 [3 ♀ ♀, 3 ♂ ♂]**

C h i n a : 2 ♀ ♀, 2 ♂ ♂, Kansu mer., Xiahe / Labrang, 1.-15.VI.1998, leg. Major; 1 ♂, Yunnan prov., Heishui 35 km N Lijang, 21°13'N 100°19'E, 18.VI.-4.VII.1993 leg. Becvar; 1 ♀, Gansu, Lanzhou Umg. S Aiganzen, 2000m, 26.VII.1999, leg. Huber.

***Crabro korbi* (KOHL 1883) [2 ♂ ♂]**

S p a i n : 2 ♂ ♂, Soria, 26.V.1965, leg. Linsenmaier.

***Crabro lapponicus* ZETTERSTEDT 1838 [2 ♀ ♀, 2 ♂ ♂]**

C z e c h R e p u b l i c : 1 ♀, Bohemia, Majdalena, leg. K. Deneš; 1 ♀, Maxov, Jizerske Hory, VII.1966, leg. J. Macek.

S l o v a k i a : 1 ♂, Geravy Slov. Raj, 25.VI.1984, leg. Padr; 1 ♂, Javorina, 5.VII.1951, leg. Palasek.

***Crabro latipes* F. SMITH 1856 [2 ♂ ♂]**

C a n a d a : 1 ♂, Ont., Toronto, 22.VIII.1965, leg. Knerer.

U . S . A . : 1 ♂, Colorado, Roosevelt Nat. Forest South Fork, Cache la Poudre River, cca. 40°35'N, 105°40'W, 2500m, 29.VII.1995, leg. Malicky.

***Crabro mocsaryi* KOHL 1915 [12 ♀ ♀, 2 ♂ ♂]**

K i r g i z i y a : 1 ♀, Narynskaya, Distr. Dzhungalsky, Nordteil des Sary-Kamysh-Gebirges, Tal des Flusses Kobuksu, 2300-2400m, 4.-5.VII.1996, 41°55'N 74°05'E, leg. Rausch; 1 ♀, Oshskaya Obl., Distr. Alajsky, S des Ortes Kok-Suu, Bachtal, 39°40'28''N 73°45'57''E GPS, 3000m, 24.-25.VII.1998, leg. H. & R. Rausch; 1 ♀, 1 ♂, Talasskaya Oblast, Taiass-Gebirge am Fluss Ara-Byik, 42°21'39''N 70°57'10''E GPS, 2200-2600m, 4.VII.1998, leg. H. & R. Rausch; 3 ♀ ♀, 10 km E Taldi-Suu, 42.9°N 78.0°E, (Issik-Kul), 23.V.1994, leg. K. Deneš jr.; 1 ♀, Tash-Arik, 11 km E Talas, 4.VII.1992, leg. M. Halada; 1 ♀, Tan-San, Ala-Arca, 1.-2.VII.1983 cca, 1800m, leg. Tkalkū; 1 ♀, Dzahal-Abad area, VI.2000, leg. Gurko; 3 ♀ ♀, 1 ♂, Frunse, 50 km Salla Arca, 7.VII.1981, leg. Kocourek.

***Crabro occultus* FABRICIUS [2 ♀ ♀, 4 ♂ ♂]**

A l g e r i a : 2 ♂ ♂, Alger-Zeralda, 10.VI.1972, leg. A. Hoffer; 1 ♂, Alger-Tipasa, 8.VI.1972, leg. A. Hoffer; 1 ♂, Alger-Sidi Ferouch, 7.VI.1972, leg. A. Hoffer.

M o r o c c o : 1 ♀, Martil env., 20.V.1997, leg. K. Deneš jr.; 1 ♀, Kenitra, 30.IV.1990, leg. M. Halada.

T u n i s i a : 1 ♀, Ile de Jerba, Rass Taguemess, 22.-28.IV.1998, leg. M. Hradsky.

***Crabro peltarius* (SCHREBER 1784) [55 ♀ ♀, 62 ♂ ♂]**

B u l g a r i a : 2 ♂ ♂, Gara Pirin, 22.V.1983, leg. J. Halada; 3 ♀ ♀, 1 ♂, Slancev Brjag, 18.-30.V.1989, leg. J. Halada; 1 ♂, Melnik, 23.-26.V.1983, leg. M. Halada; 1 ♀, 1 ♀, Charmanli, 18.V.1979, leg. Blaha.

**F i n l a n d** : 3 ♂♂, Hirvensalmi, VII.1968, leg. Ranin; 3 ♀♀, Helsingin pitäjä, 30.VI.1968, leg. Ranin.

**M o n g o l i a** : 2 ♀♀, Ulanbatar, Tuui riv. vall., 12.VII.1903, leg. J. Halada.

**R o m a n i a** : 1 ♀, Delta Dunarii pd. Letea, 10m, 10.VI.1995, leg. Ruicanescu.

**T u r k e y** : 4 ♀♀, 22 ♂♂, 10 km W Urgup, 15.VI.1968, leg. M. Halada; 12 ♂♂, Urgup, Capadocia, 13.VI.1998, leg. M. Halada; 1 ♂, Guzeloz, Capadocia, 15.VI.1998, leg. M. Halada; 1 ♂, Gevas, Van Gölü, 29.VI.1993, leg. K. Deneš; 1 ♀, Tuzlagozu (Baykan), 4.VI.1998, leg. M. Halada; 2 ♀♀, 20 km W Van, 5.VII.1997, leg. M. Halada.

**U k r a i n e** : 1 ♀, Feltava, 13.VII.1985, leg. Halada.

The remaining specimens come from Czech Republic (33 ♀♀, 10 ♂♂), Germany (1 ♀), Hungary (1 ♀, 2 ♂♂) and Slovakia (6 ♀♀, 6 ♂♂).

### ***Crabro peltatus* FABRICIUS 1793 [1 ♂]**

**B u l g a r i a** : 1 ♂, Sandanski, 14.VIII.1993, leg. M. Halada.

### ***Crabro peltista* KOHL 1915 [1 ♀, 2 ♂♂]**

**M e x i k o** : 2 ♂♂, Oaxa 1950m, 5 km E Mitla (Passhöhe), 16°56'N 95°17'W, 3.VIII.1991, leg. Aspöck, Rausch, Ressel; 1 ♀, Chiapas, 16°06'N 91°41'W, Lagunas de Montebello, 1500m, 30.-31.VII.1991, leg. Aspöck, Rausch, Ressel.

### ***Crabro pugillator* A. COSTA 1871 [3 ♀♀, 3 ♂♂]**

**T u r k e y** : 1 ♂, 40 km NE Muradiye, 2200m, 5.VII.2000, leg. M. Halada; 3 ♀♀, 2 ♂♂, 20 km E Gurun, Mezikiran Gecidi, 10.VII.1997, leg. M. Halada.

### ***Crabro scutellatus* (von SCHEVEN 1781) [65 ♀♀, 62 ♂♂]**

**E s t o n i a** : 1 ♀, Tallin, 15.VI.1982, leg. Eiza; 1 ♀, Tallin, 1.-10.VII.1982, leg. Eiza.

**F i n l a n d** : 8 ♀♀, 2 ♂♂, Hirvensalmi, VII.1968, leg. Ranin.

The remaining specimens come from Czech Republic (52 ♀♀, 58 ♂♂) and Slovakia (3 ♀♀, 2 ♂♂).

### ***Crabro sibiricus* A. MORAWITZ 1866 [1 ♂]**

**M o n g o l i a** : 1 ♂, Ulanbatar, Tuul riv. vall., 12.VII.2003, leg. J. Halada.

### ***Crabro signatus* F. MORAWITZ 1893 [14 ♀♀, 36 ♂♂]**

**K a z a k h s t a n** : 1 ♂, Alma Arasan 1400m, Alma Ata env., 10.VII.1976, leg. Niedl; 1 ♀, Fabrichny, 40 km E Alma Ata, 9.VII.1992, leg. Jirousek.

**K i r g i z i y a** : 4 ♀♀, 11 ♂♂, Alai Mz. R. Jkizjak, Kok-Suu riv. bass., VII. 2000, leg. Gurko; 1 ♀, 5 ♂♂, Kirghizaky Mt. Rg., Tshon-Azyk, VI.2000, leg. Gurko; 3 ♀♀, 8 ♂♂, Terskey Alatau Arshan, 28.VIII.1999, leg. Gurko; 1 ♂, Alai Mts., Taldyk pass, 3600m, VII.2000, leg. Gurko; 3 ♂♂, Oshskaya Obl., Distr. Alajsky, S des Ortes Kok-Suu, Bachtal, 39°40'38''N 73°45'57''E GPS, 3000m, 24.-25.VIII.1998, leg. H. & R. Rausch; 3 ♂♂, Talaskaya Oblast, Talass-Gebirge, am Fluß Ara-Byik, 42°21'39''N 70°57'10''E GPS, 2200-2600m, 4.VII.1998, leg. H. & R. Rausch; 1 ♀, 1 ♂, Dzhalai Abadskaya Obl., Tschatkai-Geb., E Dzhany-Bazar, 41°40'24''N 70°54'48''E GPS, 2150-2700m, 10.-11.VII.1998, H. & R. Rausch; 2 ♀♀, 1 ♂, Tash-Arik, 11 km E Talas, 4.VII.1992, leg. M. Halada; 1 ♂, Ala Buka, 41.5°N 71.2°E, 6.VI.1995, leg. J. Halada; 1 ♂, Frunse, 50 km S Alla Arca, 7.VII.1981, leg. Kocourek; 1 ♀, Oshskaya Obl., Distr. Dchon-Alajsky Alai-Geb., NNE Kyzzyi-Eschme, 39°36'54''N 72°17'26''E GPS, 2900m, 20.VII.1998, leg. H. & R. Rausch; 1 ♀, Tssyk-Kutskaya Obl., S Teploklyochenka, 42°27'N 78°31'E, 2000-2300m, 18.-20.VI.1995, H. & R. Rausch, P. Ressel.

***Ectemnius* DAHLBOM 1845 [1511 ♀♀, 2365 ♂♂]**

***Ectemnius basiflavus* (BRÈTHES 1910) [1 ♀, 9 ♂♂]**

**Ecuador:** 7 ♂♂, Napo prov., 70 km SW Coca, Loreto, 300m, 4.-10.III.2002, leg. M. Halada; 1 ♂, Napo prov., 8 km S Tena, Puerto Napo, 400m, 16.-22.II.2002, leg. M. Halada.

**Mexiko:** 1 ♂, Chiapas, Lagunas de Montebello, 1500m, 16.06°N 91.41°W, leg. Aspöck, Rausch, Ressler.

**Venezuela (Y V):** 1 ♀, Est Bolivar, Sta. Elena / Uairen, 25.-26.I.1996, leg. J. Plass.

***Ectemnius borealis* (ZETTERSTEDT 1838) [25 ♀♀, 52 ♂♂]**

**Finland:** 1 ♀, 1 ♂, Hirvensalmi, VII.1968, leg. Ranin; 2 ♂♂, Kitee, 27.VI.1963, leg. Ranin; 1 ♂, Lammi, 20.VI.1957, leg. Ranin; 1 ♀, N Helsingin pitäjä, 16.VII.1967, leg. Ranin.

**Russian Federation:** 1 ♂, Cornoaltasjkaya Turocat AO mer., 20.-23.VIII.1993, leg. Snizek; 1 ♂, W Caucasus mt., Krasnaya Polyana Atchishkho mts., VI.2000, leg. Gurko.

**Slovenia:** 1 ♀, Podkoren, 9.VIII.1978, leg. Paré.

The remaining specimens come from Czech Republic (17 ♀♀, 38 ♂♂), Slovakia (5 ♀♀, 7 ♂♂) and Switzerland (1 ♂).

***Ectemnius carinatus* (F. SMITH 1873) [5 ♀♀, 23 ♂♂]**

**Argentina:** 3 ♀♀, Villa Sallester, Prov. Buenos Aires, 1.XII.1952, leg. S. Schajovskoj; 1 ♀, 3 ♂♂, Pronun Iamiento, Prov. Entre Rios, XII.1963, leg. Walz; 3 ♂♂, San Osidos, Prov. Buenos Aires, XII.1960, leg. Walz; 6 ♂♂, Pronun Iamiento, Prov. Entre Rios, II.1964, leg. Walz.

**Ecuador:** 1 ♀, 10 ♂♂, Napo prov., 70 km SW Coca, Loreto, 300m, 4.-10.III.2002, leg. M. Halada; 1 ♂, Napo prov., 8 km S Tena, Puerto Napo, 400m, 16.-22.II.2002, leg. M. Halada.

***Ectemnius cavifrons* (THOMSON 1870) [48 ♀♀, 70 ♂♂]**

**Finland:** 1 ♂, Helsinki Villinki, 20.VII.1962, leg. Ranin.

**Romania:** 1 ♀, Cluj, 20.X.1978, leg. Bechet.

**Russian Federation:** 1 ♂, Bajkal, Nikola, IX.1988; 1 ♀, Bajkal mer., Nikola, 1.-7.VIII.1984, leg. K. Deneš.

**Tadzhikistan:** 1 ♀, Fachrobod, 1200m, Dushanbe env., 20.V.1974, leg. K. Deneš.

**Ukraine:** 1 ♀, Lvov, 14.VII.1985, leg. J. & M. Halada; 1 ♀, Rovne, 14.VII.1985, leg. J. & M. Halada.

The remaining specimens come from Czech Republic (41 ♀♀, 66 ♂♂) and Slovakia (2 ♀♀, 2 ♂♂).

***Ectemnius cephalotes* (OLIVIER 1792) [36 ♀♀, 21 ♂♂]**

**Bulgaria:** 1 ♀, Sefia, ment. Vitesa, 5.VIII.1982, leg. J. Halada.

**Morocco:** 1 ♂, Moyen Atlas, Col du Zad, 33°02'N 5°06'W, 1500m, 24.VII.1982, leg. Rausch.

**Syria:** 1 ♀, Malula, 27.VI.1994, leg. Hradsky.

**Ukraine:** 1 ♂, Crimea, Simpheropol, 3.VIII.1959, leg. Gurko; 1 ♂, Crimea, Simpheropol, 16.VI.1997, leg. Gurko; 2 ♂♂, Crimea, Simpheropol, 10.VI.1999, leg. Gurko; 1 ♀, Rovno, 14.VII.1985, leg. J. M. Halada; 1 ♀, Crakov, leg. Kocourek.

The remaining specimens come from Czech Republic (23 ♀♀, 7 ♂♂) and Slovakia (9 ♀♀, 9 ♂♂).

***Ectemnius chagrinatus* LECLERCQ 1950 [2♂♂]**

E c u a d o r : 2♂♂, Tungurahua prov., Banos, 1500m, 14.II.2002, leg. M. Halada.

***Ectemnius confinis* (WALKER 1871) [93♀♀, 130♂♂]**

B u l g a r i a : 3♂♂, Slancev Brjag, 28.VI.-14.VII.1971, leg. Padr; 1♀, 2♂♂, Slancev Brjag, 20.VII.-5.VIII.1965, leg. Padr; 3♂♂, Slancev Brjag, 25.VII.1968, leg. Padr & Kocourek; 1♀, Akhiopol, VII.1977, leg. Hoffer; 1♂♂, Trakia, Trud, 25.VIII.1997, leg. Zaykov; 2♂♂, Melnik, 13.VIII.1993, leg. Halada; 1♂, Slancev Brjag, 26.VII.1968, leg. Kocourek.

C z e c h R e p u b l i c : 6♀♀, 4♂♂, Moravia S, 30 km S Brno, Popice, 12.VIII.2000, leg. Snizek; 1♀, Moravia, Lednice, 20.VIII.1970, leg. Strejcek; 1♀, Moravia, Cejc, 28.V.1977, leg. Kocourek; 1♀, Bohemia, C. Krumlov, 20.VI.1994, leg. Karas; 1♂, Ceske Budejovice, Srubec, 20.VIII.2001, leg. Ma. Halada; 1♂, Moravia, Murovo, VII.1977, leg. Polak.

F r a n c e : 1♀, St. Aygulf env., pr. St. Tropez, VII.1990, leg. Stejcek.

G r e e c e : 6♂♂, Epeiros, 20 km N Preveza, 29.VIII.1997, leg. J. Halada; 1♀, 1♂, Kreta E, Prina env., 7 km S Istro, 4.-12.VI.2002, leg. K. Deneš sen.; 5♂♂, Sithonia, Sikia, 23.VIII.1978, leg. Warncke.

H u n g a r y : 1♀, 1♂, Hajdhu-Bihar, Hortobagy, K-Cz, 26.VIII.1992, leg. Tiefenthaler; 2♂♂, Tata, VIII.1968, leg. Flicek.

I t a l y : 1♀, 10♂♂, Toscana, Isl. Orbetello, 6.VIII.1999, leg. J. Halada; 3♀♀, 1♂, Sardegna E, Lanusei env., 29.VI.2000, leg. J. Halada; 1♀, Basilicata, 25. km W Lauria, 4.-5.VIII.1999, leg. J. Halada; 3♂♂, Sardinia-NE, Obia env., 4.VII.2000, leg. J. Halada.

J o r d a n : 1♂, Safi, 50 km of Karak, 15.VI.1996, leg. Mi. Halda; 1♂, Jordan Valley, S Shuna, 25.-26.IV.1996, leg. Mi. Halada; 1♀, 30 km N Tafilah, 2.V.1996, leg. Ma. Halada.

K a z a k h s t a n : 2♀♀, 10 km E Djambul, 31.V.1994, leg. Ma. Halada; 1♀, River Ili, Aidarli, 14.VI.1992, leg. Deneš; 1♀, Djambul env., Kara Tau prusak Ujuk, 1000m, 3.VI.1980, leg. Padr.

K i r g i z i y a : 3♂♂, Kizil-Kiya, 40.2°N 72.1°E, 15.V.1994, leg. J. Halada.

M o n t e n e g r o : 1♀, Tcherna Gora, Ulcini, 21.VI.1996, leg. Hofer.

R o m a n i a : 2♀♀, Wald Hagieni, Se Dobrogea, 70m, 15.VIII.1994, leg. Rakosy; 2♀♀, 1♂, Transsylvania, Fizer, 1.VIII.1968, leg. Padr; 1♂, Brasov, Zizin, 700m, 9.VIII.1994, leg. Szeltli.

S l o v a k i a : 1♂, Sturovo, 7.VI.1965, leg. Kocourek; 1♂, N Zamky-Cenkov, VI.1978, leg. Kocourek.

S l o v e n i a – W : 1♀, 5 km E Koper, 10.VII.1999, leg. J. Halada.

T u n i s i a : 4♂♂, Douz env., 31.V.1994.

T u r k e y : 1♂, N of Adana, 16.VI.2000, leg. M. Halada; 1♀, 2♂♂, Halfeti env., 3.-5.V.1994, leg. Mi. Halada; 1♂, Nemrut Dagı Karadut, 2.VII.1993, leg. Mi. Halada; 1♂, Acigöl, Cardak env., 7.VII.1993, leg. Deneš.

T u r k m e n i a : 1♀, 10♂♂, Sandykathy, ex. f. 1992, leg. J. Halada; 2♂♂, Sandykathy, 28.III.-4.IV.1992, leg. Deneš; 2♂♂, Ashabat, 20 km E Annau, 3.VI.1993, leg. M. Halada; 3♀♀, 2♂♂, Nebit Dag, 25 km NW Jebel, 28.IV.1993, leg. M. Halada; 1♂, Sandikatzi env., 3.-13.V.1993, leg. Deneš; 1♂, Kopet-Dag, Geok-Tepe 15 km S, 2.V.1993, leg. M. Halada; 1♂, Tzardjou, 40 km N Denev, 9.VI.1993, leg. M. Halada; 1♀, Tzemenibit, 12.V.1993, leg. Deneš; 1♀, Kugit Angtau mount, Koiten, 8.VIII.1993, leg. Deneš; 1♂, Tzarschanga, 45 km NE Kartyuk, 6.V.1993, leg. M. Halada.

U k r a i n e : 1♀, Odessa reg., Kagul env., VIII.2000, leg. Gurko.

U z b e k i s t a n : 53♀♀, 34♂♂, Papngan, 41.2°N 70.6°E, 20 km NW Kokand, 12.V.1994, leg. Ma. Halada; 4♂♂, Samarkand env., 19.-21.V.1994, leg. Ma. Halada; 1♂, 5 km W Ddjizak, 39.9°N 67.5°E, 23.V.1994, leg. Ma. Halada; 1♂, Yangikichlak, 100 km NW Ddjizak, 40.3°N 66.9°E, 25.V.1994, leg. Ma. Halada; 1♂, Aktas, 70 km NE Taschkent, 41.2°N 69.4°E, 27.V.1994, leg. Ma. Halada; 1♀, Navbakhor, 41.3°N 70.9°E, 30 km N Kokand, 13.V.1994, leg. J. Halada.

***Ectemnius continuus* (FABRICIUS 1804) [346♀, 515♂]**

- B u l g a r i a :** 2♂♂, Melnik, 13.VIII.1993, leg. M. Halada; 1♂, Slancev Brjag, 28.VI.-4.VII.1971, leg. Padr; 1♂, Slancev Brjag, 15.VII.1968, leg. Kocourek; 1♂, Slancev Brjag, 1.VIII.1968, leg. Kocourek; 1♂, Dimovo, 13.VI.1987, leg. J. Halada; 1♀, Trakia, Proslav, 30.VI.1996, leg. Zaykov; 1♀, Ropodamo, 20.VII.1979, leg. Hoffer; 1♀, Vlahi, 14.VIII.1993, leg. M. Halada; 1♀, Mts. Pirin, Begovica; 13.VIII.1993, leg. Mi. Halada; 1♀, Rodopi Zdravez, 1.VIII.1997, leg. Zaykov; 1♀, Sofia, mont. Vitesa, 5.VIII.1982, leg. J. Halada; 1♀, mont. Pirin n. occ., 1000-1500m, 2.VIII.1982, leg. J. Halada.
- C h i n a :** 3♀♀, Yunnan, Lugu Lake-Luo Shui, 27°45'N 100°45'E, 8.-9.VII.1992, leg. S. Becvar; 1♀, Yunnan, Lijiang, 1800m, 26°53'N 100°18'E, 23.VI.-27.VII.1992, leg. S. Becvar.
- C r o a t i a :** 1♀, 3♂♂, Istria, Laborika, 20.VII.2002, leg. Ma. Halada; 1♂, Kamenica, 14.VII.1961; 1♀, Istria, Porec env., 1.-3.IX.1996, leg. J. Halada; 1♀, Istria, Pula env., IX.1996, leg. J. Halada; 1♀, Krk, Baska, 8.-30.VI.1973, leg. Heinrich.
- F i n l a n d :** 4♂♂, Hirvensalmi, VII.1968, leg. Ranin; 1♂, Kitee, 26.VI.1963, leg. Ranin; 1♂, N Helsinki Villiaki, 18.VII.1952, leg. Ranin; 1♂, N Helsinki, 14.VII.1963, leg. S. Ranin.
- F r a n c e :** 3♀♀, Vauxaillon, 25.V.1926, leg. Harman.
- H u n g a r y :** 1♀, Örkeny pisky, 13.-17.VII.1981, leg. Padr.
- I t a l y :** 1♀, Südtirol, Vinschgau, Schluderns, 1000m, 3.VII.1992, leg. Tiefenthaler; 1♀, Ligurien, Villanova di Albenga, 18.-28.VI.1995, leg. Tiefenthaler.
- J o r d a n – W :** Jordan valley, Dayr Alla, 27.IV.1996, leg. Mi. Halada.
- K a z a k h s t a n :** 1♂, SE Tchilik env., 20.VI.1992, leg. J. Halada; 1♀, 20 km SE Aksay env., 16.-19.VI.1992, leg. Deneš.
- K i r g i z i y a :** 1♂, Tchatcal Mt. R., Khodzha-Ata r., 41°50'N 71°56'E, 5.VII.2000, leg. Makogonova; 1♂, Ferghansky Mt. R., Kok-Jangak, VI.2000, leg. Gurko; 3♂♂, Terek-Sai, 41.5°N 71.1°E 7.VI.1995, leg. J. Halada; 2♀♀, 2♂♂, Arslanbad, 41.3°N 72.9°E, 12.-13.VI.1995, leg. J. Halada.
- M o n g o l i a :** 6♀♀, 3♂♂, Ulanbatar, Tuul riv. vall., 12.VII.2003, leg. J. Halada; 1♀, 80 km N Ulanbatar, Mandal city, 9.VII.2003, leg. J. Halada.
- M o r o c c o :** 1♂, Tamri, 70 km N Agadir, 8.V.1996, leg. Ma. Halada; 1♂, Tiznit Oued Massa, 8.V.2003, leg. Snizek; 1♂, Mohammedie, 15.IV.1990, leg. M. Halada; 1♀, Taroudant, 22.IV.1990, leg. M. Halada.
- R o m a n i a :** 1♂, Baile Herculane, 24.VI.2002, leg. M. Halada.
- R u s s i a n F e d e r a t i o n :** 1♂, Primorkiyi Ryazanovka/Strand, 16.VI.1993, leg. Sidorenko; 1♀, Ussuri reg., Jasnoe mount., 400-800m, Oblatchnaja, 12.-16.VII.1989, leg. Becvar; 1♀, Gagre env., VI.1976, leg. Deneš.
- S p a i n :** 1♂, Soria, 18.VI.1964, leg. Linsenmaier; 1♂, Andalucia, Sierra de Maria, 25. km W Lorca, 10.V.2003, leg. J. Halada; 2♀♀, Costa Brava, Platja de Aro, 8.-14.IX.1991, leg. Deneš.
- S l o v e n i a :** 1♀, 5 km E Koper, 10.VII.1999, leg. J. Halada; 1♀, Krajnska gora, 6.VIII.1978, leg. Paré.
- S y r i a :** 4♂♂, Faouar, 33°13'N 35°55'E, 2.VI.2001, leg. Plass; 5♂♂, Faouar 33°13'N 35°55'E, 2.V.-20.VI.2001, leg. Plass; 1♂, Faouar (UN-Camp) 950m, 33°13'N 35°53'E, 26.IX.2001, leg. Pass; 1♀, 30 km W Damascus, 19.VI.2000, leg. M. Halada.
- T a d z h i k i s t a n :** 2♂♂, Darvazskij chrebet Tavildara, 13.VI.1990, leg. J. & M. Halada; 1♂, Tashkent, 4.VII.1981, leg. Kocourek.
- T u r k e y :** 1♂, Silifke env., 4.VII.1993, leg. Mi. Halada; 1♂, Aksehir Konya, 2000m, 2.VIII.1991, leg. Halada; 2♀♀, Gevas, Van Gölü. 29.VI.1993, leg. Deneš; 1♀, 30 km N Erdemli Aslanli, 17.VI.1998, leg. Ma. Halada; 1♀, N Akseki, 19.VI.1998, leg. Ma. Halada; 1♀, 60 km SW Malatya Erkenek, 1300m, 26.VI.2000, leg. M. Halada.
- T u r k m e n i s t a n :** 1♀, 2♂♂, Aschabat, 40 km W Firuza, 6.VI.1993, leg. M. Halada; 1♂, Kara-Kala, 3.V.1989, leg. Becvar.

**Ukraine:** 1♂, Skole, Verecky pr., 15.VII.1989, leg. J. Halada; 8♀♀, 11♂♂, Crimea, Eupatoria, 24.VII.1999, leg. Gurko; 1♀, 6♂♂, Crimea, Eupatoria, 13.VII.2000, leg. Gurko; 2♂♂, Crimea, Jalta, 10. VII.1998, leg. Gurko; 24♀♀, 58♂♂, Crimea, Simpheropol, 1994-1999, leg. Gurko; 1♂, Crimea, Simpheropol Anatra, VII.2000, leg. Gurko; 1♀, Crimea, 18 km E Partizanskoe, 11.V.2000, leg. Gurko.

The remaining specimens come from Austria (1♀), Czech Republic (226♀♀, 310♂♂), Germany (8♀♀, 3♂♂) and Slovakia (22♀♀, 54♂♂).

### *Ectemnius continuus* (FABRICIUS 1804) variation [9♀♀, 15♂♂]

Clypeus and legs nearly complete yellow!

**Kazakhstan:** 1♀, River Ili, Aidarli, 14.VI.1992, leg. J. Halada; 2♂♂, Matai-desert, 46.0°N 78.6°E, 23.-25.VI.1995, leg. Mucka.

**Kirgiziya:** 1♂, Kirgiziya 40.2°N 72.1°E, 15.V.1994, leg. Ma. Halada.

**Tadzhikistan:** 1♀, Vachs, 4.-6.VI.1990, leg. G. & M. Halada.

**Turkmenistan:** 1♀, 1♂, Sandikazi env., 3.-13.V.1993, leg. Deneš.

**Uzbekistan:** 5♀♀, 9♂♂, Papngan 41.2°N 70.6°E, 20 km NW Kokand, 12.V.1994, leg. Ma. Halada; 1♀, Fergana env. 30 km, Kadamzaj, 21.-22.V.1980, leg. Padr; 1♂, Samarkand env., 19.-21.V.1994, leg. Ma. Halada; 1♂, Taskent, 4.VI.1959, leg. Kohousek.

### *Ectemnius crassicornis* (SPINOLA 1808) [191♀♀, 329♂♂]

**Azerbaijan:** 1♂, Gobustan, 13.V.1978, leg. Kocourek.

**Bulgaria:** 26♀♀, 94♂♂, Slancev Brjag, 1968-1971, leg. Kocourek; 5♀♀, 3♂♂, Sandanski, 1966-1969, leg. Kocourek; 2♀♀, Varvara, 12.VIII.1970, leg. Kocourek; 2♀♀, 4♂♂, SW Vlahi, 14.VIII.1993, leg. M. Halada; 2♀♀, 13♂♂, SW Melnik, 13.VIII.1993, leg. M. Halada; 1♀, Sandanski, 14.VIII.1993, leg. M. Halada; 5♀♀, 26♂♂, Slancev Brjag, 1965-1971, leg. Padr; 3♀♀, 1♂, Nessebar, 1.-14.VIII.1982, leg. Padr; 1♀, 1♂, Trakia, Proslav, 15.IX.1997, leg. Zaykov; 1♀, Trakia, Proslav, 20.VII.1996, leg. Zaykov; 1♀, Rodopi, Hrabrino, 20.V.1977, leg. Zaykov; 1♀, Tracia, 1.VIII.1991; 1♀, Kate Astg, 1965; 4♂♂, Nesebar, VIII.1970, leg. Kocourek; 1♂, Trakia, Trud, 20.VII.1997, leg. Zaykov; 1♂, Balcik-Tuziata, 11.VII.1979, leg. Talcu; 1♂, Rodopi, Galabovo, 25.VII.1997, leg. Zaykov; 1♂, Kresna, V.1988, leg. Kocourek; 1♂, Sozopol, VII.1978, leg. Hoffer; 1♂, Slancev Brjag, 18.-30.V.1989, leg. J. Halada; 3♂♂, SW Rila, 16.VIII.1993, leg. M. Halada; 1♂, Rodopi, Hrabrino, 1.IX.1997, leg. Zaykov.

**Croatia:** 1♀, Istria, Umag env., 30.-31...1996, leg. J. Halada; 2♀♀, 1♂, Istria, Laborika, 20.VII.2002, leg. Ma. Halada; 1♀, Makaska, 6.VI.1990, leg. Deneš; 3♂♂, Istria, SW Vodnjan, 18.VII.2002, leg. Ma. Halada; 2♂♂, Istria, Vodnjan env., 7.-9.VII.1999, leg. J. Halada; 2♂♂, Istria, 10 km E Rovinu, 16.VII.2002, leg. Ma. Halada; 1♂, Istria, Umag env., 5.IX.1996, leg. J. Halada; 1♂, Istria, Portoro, VI.1970, leg. Paré; 1♂, Zadar, VII.1967, leg. Padr; 1♂, Zadar-Sukesany, 30.VII.1967, leg. Padr.

**Czech Republic:** 1♂, Cejc, VII.1965, leg. Kocourek.

**Greece:** 3♀♀, 1♂, Pelopones, 40 km S Argos, P. Astros, 4.VII.1996, leg. Ma. Halada; 1♀, 4♂♂, 20 km N Pilos Marathopoli, 8.VII.1996, leg. Ma. Halada; 1♀, Pelopones, Achaia, env. Zachlorou, Nalavrita, 38°05'N 22°09'E, 600-700m, 31.V.-I.VI.1993, leg. H. & R. Rausch; 1♀, Mittel-Kreta, L. Hersonisson, 13.-16.VI.1993, leg. Tiefenthaler; 4♂♂, Epeiros, 20 km N Preveza, 29.VIII.1997, leg. J. Halada; 1♂, Pelopones, Elis, Smema env., 37°32'N 21°40'E, 650-700m, 18.-19.V.1992, leg. H. Rausch; 1♂, 10 km NE Ioannina, 1.VII.1996, leg. Ma. Halada; 1♂, Akarnania, Ori, Ostseite bei Machalas, 15.V.1978, leg. Vogtenhuber.

**Iran:** 1♂, Pasagrad env., 8.V.1999, leg. Deneš.

**Israel:** 1♀, Dafna, 27.V.1991, leg. Warncke.

**Italy:** 1♀, 1♂, Calabria, 15 km S Lokri, 1.-2.VIII.1999, leg. J. Halada.

**Jordan:** 8♀♀, 2♂♂, N Shuna, 20.-22.IV.1996, leg. M. Halada; 4♀♀, 2♂♂, N Shuna, 29.-



- 30.IV.1996, leg. M. Halada; 4 ♀, 2 ♂, 10 km N Petra, 3.V.1996, leg. M. Halada; 2 ♀, Petra, 14.V.1995, leg. Deneš jun.; 1 ♀, 1 ♂, Jordan valley, Dayr Alla, 27.IV.1996, leg. Mi. Halada; 2 ♂, Jarash env., 1.V.1996, leg. M. Halada; 1 ♂, Pella, 4.V.1995, leg. Deneš jun.
- K a z a k h s t a n :** 1 ♀, Dzambul env., Kara Tau, prusayk Ujuk (1000m), 3.VI.1980, leg. Padr; 1 ♀, Issyk, 1756m, Zailij. Ala Tau, 29.V.1994, leg. Niedl; 2 ♀, 10 km E Djambul, 31.V.1994, leg. Ma. Halada. 2 ♀, Talas Mt. R., 3 km W Dzhabagly, 42°26'N 69°58'E, 5.VIII.2000, leg. Makogonova; 1 ♀, Varnovka, 80 km E Djambul, 30.VI.1992, leg. Jirousek; 1 ♂, Fabritchny, 40 km E Alma Ata, 23.VI.1992, leg. Jirousek.
- K i r g i z i y a :** 14 ♀, 11 ♂, Ala archa riv., Kashka-Suu, 1600m, VII.2000, leg. Gurko; 8 ♀, 3 ♂, Mt. R. Ala-Archa riv., Corn-Say, 1650m, VII.2000, leg. Gurko; 1 ♀, Alai Mt. R. Jkizjak, Kok-Suu riv. bass., VII.2000, leg. Gurko; 1 ♀, Mt. R. Malinovka, 1650m, 10.V.2000, leg. Gurko; 1 ♀, Ferghanskyi Mts., Toskol-Ata, 1200m, 1.VIII.2001, leg. Gurko.
- R o m a n i a :** 1 ♂, Mamaja, 20.VIII.1972, leg. Benes.
- S l o v a k i a :** 2 ♀, Sturovo, V.1967, leg. Kocourek; 1 ♀, Sturovo, 7.VIII.1953, leg. Kocourek; 1 ♀, Gbelece, VII.1953, leg. Kocourek; 1 ♂, Cajkov, VIII.1960, leg. Kocourek; 1 ♂, Kamenica n/Hr., VII.1963, leg. Kocourek; 2 ♂, Sturovo, 23.VII.1967, leg. Kocourek; 1 ♂, Kamenice n/Hr., 31.VII.1970, leg. Padr; 1 ♂, Kamenice n/Hr., 11.VII.1964, leg. Kocourek; 1 ♂, Sturovo, 13.VII.1964, leg. Kocourek; 1 ♂, Sturovo, VI.1974, leg. Kocourek.
- S p a i n :** 1 ♀, Andalucia, Sierra Alhamilla Lucainea, 25.V.2003, leg. J. Halada; 1 ♀, SW Murcia, Sierra de Espanula, 11.V.2003, leg. J. Halada; 2 ♂, Andalucia, Sierra de Maria, 25 km W Lorca, 10.V.2003, leg. J. Halada.
- S y r i a :** 2 ♂, Faouar, 33°13'N 35°55'E, 12.V.2001, leg. Plass; 1 ♂, Faouar, 33°13'N 35°55'E, 1.VI.2001, leg. Plass; 1 ♂, Faouar, 33°13'N 35°55'E, 2.VI.2001, leg. Plass; 1 ♂, (UN-Camp) 950m, 33°13'N 35°53'E, 13.X.2001, leg. Plass; 3 ♂, 40 km NE Damascus, 22.V.1996, leg. Ma. Halada; 1 ♂, 40 km NE Damascus, 23.V.1996, leg. Ma. Halada; 1 ♂, Salkhad, 6.V.1996, leg. Ma. Halada; 4 ♀, 50 km SE Suwayda Anata, 20.-21.V.1996, leg. Ma. Halada; 2 ♀, 30 km Suwayda Dibbin, 15.-17.V.1996, leg. Ma. Halada; 1 ♀, 2 ♂, Faouar, 33°13'N 35°55'E, 22.V.2001, leg. Plass; 1 ♀, Bloudan, 16.V.1995, leg. Deneš; 1 ♀, NW Aleppo Bulbul, 24.VI.2000, leg. M. Halada; 1 ♀, 10 km S Suwayda Kafir, 19.V.1996, leg. Ma. Halada;
- T a d z h i k i s t a n :** 2 ♀, Dusambe env., 25.VI.1981, leg. Kocourek; 1 ♀, Taskent 40 km E Circik, 4.VI.1981, leg. Kocourek; 1 ♀, Vose 120 km SE Dushanbe, 12.-13.V.1991, leg. Halada; 1 ♀, 3 ♂, Nurek (dam), 7.-10.VI.1990, leg. J. & M. Halada; 1 ♂, Dusanbe env., 1.V.1977, leg. Strejcek; 1 ♂, Dushanbe env., 8.V.1983, leg. Padr.
- T u r k e y :** 4 ♀, 5 ♂, Bitlis, Nemrut Dag, 2000m, 16.VIII.1991, leg. M. Halada; 2 ♀, 7 ♂, Konya, Mt. Aydos/Eregli, 1600m, 7.VIII.1991, leg. M. Halada; 3 ♀, 2 ♂, Halfeti env., 3.-5.V.1994, leg. Mi. Halada & Deneš; 1 ♀, 2 ♂, Halfeti (Birecik), 30.V.1998, leg. Snizek & Ma. Halada; 1 ♀, 20 km SW Bitlis, 23.VI.1997, leg. Ma. Halada; 2 ♀, 1 ♂, Agri env., 27.VI.1993, leg. Mi. Halada; 1 ♀, Aciöl Cardak env., 7.VII.1993, leg. Mi. Halada; 1 ♀, 40 km E Mus Cornelek, 29.V.1996, leg. Ma. Halada; 1 ♀, 10 km W Urgup, 15.VI.1998, leg. Ma. Halada; 1 ♀, 1 ♂, SE Elazig Hazar Göllü, 26.VI.2000, leg. M. Halada; 1 ♀, 1 ♂, 20 km E Gurun, Mezikiran Gecidi, 10.VII.1997, leg. Ma. Halada; 1 ♀, Halfeti (Birecik), 31.V.1998, leg. Ma. Halada; 10 km N Gercus, 5.VII.1998, leg. Ma. Halada; 1 ♀, 1 ♂, 30 km N Gercus Hasankeyf, 5.VI.1998, leg. M. Halada; 1 ♀, Van town bor., 28.VI.1993, leg. Deneš; 1 ♀, 30 km NW Gaziantep, 2001, leg. Snizek; 2 ♂, 50 km S Kars Pasit, 1.VII.1997, leg. Ma. Halada; 2 ♂, Gevas/Van Göllü, 29.VI.1993, leg. Mi. Halada; 1 ♂, Gevas, Van Göllü, 2.VII.2000, leg. M. Halada; 2 ♂, Zelve/Neveghir, 1100m, 25.VIII.1991, leg. Halada; 1 ♂, Bitlis, Süphon Dag, 2500m, 17.VIII.1991, leg. M. Halada; 1 ♂, Bitlis, Nemrut Dag, 2300m, 15.VIII.1991, leg. M. Halada; 2 ♂, Harbie, Antakya, 17.VI.2000, leg. M. Halada; 1 ♂, Avgadi 30 km E Erdemli, 1300m, 20.VI.1996, leg. Jelinek; 2 ♂, Seydischir Konyu, 1800m, 4.VIII.1991, leg. M. Halada; 3 ♂, SE Elazig Hazar Göllü, 29.VI.2000, leg. M. Halada; 2 ♂, E Erzurum, 2000m, 6.VII.2000, leg. M. Halada; 2 ♂, 20 km NW Iğdir, 29.VI.1997, leg. Ma. Halada; 1 ♂, 10 km W Gaziantep, 20.VI.1997, leg. Ma. Halada; 1 ♂, 25 km E Malatya Kopeksiz, 8.VII.1997, leg. Ma. Halada; 1 ♂, 15 km W Refahye W Erzincan, 1600m, 7.VII.2000, leg. M. Halada; 1 ♂, 15 km E Malatya, 27.VI.2000, leg. M. Halada; 1 ♂, 10 km N Konya, 14.VI.2000, leg. M. Halada; 1 ♂, Tatvan, Van G., 1.VII.2000, leg. M. Halada; 1 ♂, Tatvan env., 30.VI.1993, leg. Jirousek; 1 ♂, 30 km E Tatvan, 7.VII.1997, leg. Ma. Halada; 1 ♂, Zor Dagı Sulucan env.,

25.VI.1993, leg. Deneš; 1♂, 40 km NE Muradiye, 2200m, 5.VII.2000, leg. M. Halada; 1♂, Smirnak, VIII.1991.

**Turkmenistan**: 6♀♀, 14♂♂, Kopet-Dag, Geok-Tepe 15 km, 2.V.1993, leg. M. Halada; 11♀♀, 10♂♂, Ashabat 15 km N, 25.-31.V.1993, leg. M. Halada; 3♀♀, 7♂♂, Tzemenibit, 12.V.1993, leg. Deneš & M. Halada; 2♀♀, 2♂♂, Aschabat env., 26.IV.1993, leg. M. Halada; 2♀♀, 1♂, Sandikatzi env., 3.-13.V.1993, leg. Deneš & M. Halada; 1♀, 4♂♂, Aschabat 40 km W Firyuza, 6.VI.1993, leg. M. Halada; 1♀, Aschabat 10 km W, 14.V.1993, leg. J. Halada; 1♀, Kugit-Angtau mount. Koiten, 8.VI.1993, leg. M. Halada; 1♀, Firjuza/Kopet-dag, 27.IV.1977, leg. Niedl; 1♂, Kopet-Dag Kizil-Arvat 50 km S Chajagala, 17.V.1993, leg. M. Halada.

**Ukraine**: 1♀, Crimea, Simpheropol, 3.IX.1994, leg. Gurko; 1♀, Crimea, Eupatoria, 24.VII.1999, leg. Gurko.

**Uzbekistan**: 1♀, Fergana env. (30 km), Kadamzaj, 21.-22.V.1980, leg. Padr; 1♀, Czirczik, 41.1°N 69.1°E, 28.V.1994, leg. J. Halada; 1♀, 5 km W Ddjizak, 39.9°N 67.5°E, 23.V.1994, leg. J. Halada; 1♂, Akcza, 41.1°N 70.0°E, 20 km SW Angren, 7.V.1994, leg. Ma. Halada.

### *Ectemnius dartanus* LECLERCQ 1968 [3♀♀, 20♂♂]

**Argentina**: 3♀♀, 4♂♂, Pronun Iamiento, Prov. Entre Rios, XII.1963, leg. Walz; 1♂, Pronun Iamiento, Prov. Entre Rios, IV.1963, leg. Walz; 8♂♂, Pronun Iamiento, Prov. Entre Rios, II.1964, leg. Walz; 7♂♂, San Osidos, Prov. Buenos Aires, XII.1960, leg. Walz.

### *Ectemnius dives* (LEPELETIER & BRULLÉ 1835) [130♀♀, 252♂♂]

**Bulgaria**: 2♀♀, 2♂♂, Slancev Brjag, 28.VI.-14.VII.1971, leg. Padr; 2♂♂, Slancev Brjag, VII.1972, leg. Kocourek; 1♂, Nessebar, 1.VIII.-14.VIII.1982, leg. Padr; 1♀, 1♂, Vlahi, 14.VIII.1993, leg. M. Halada; 1♀, Rila, 10.VIII.1963, leg. Görtla.

**China**: 1♂, Yunnan prov., Heishui 35 km N Lijiang, 27°13'N 100°19'E, 18.VI.-4.VII.1993, leg. Becvar.

**Croatia**: 1♂, Istria, Portoroz, 26.V.-23.VI.1974, leg. Parré.

**France**: 1♀, 1♂, Basses Alpes, St. Laurent-de Verdon, 550m, 11.-19.IX.1979, leg. Perraudin.

**Italy**: 1♂, Südtirol, Vinschgau, Schluderns, 1000m, 30.VII.1992, leg. Tiefenthaler.

**Romania**: 1♂, Brasov Sacele, 650m, 1.IX.1994, leg. Szexely; 1♂, Brasov N Piatra Mara, 850m, 1.VIII.1994, leg. Szexely; 1♂, Bran, 550m, 19.VIII.1994, leg. Rakosy; 2♂♂, Cozia, W Turnu severin, 26.V.2002, leg. M. Halada; 3♀♀, Resita, Anina, 4.VI.2000, leg. Snizek; 1♀, Brasov, Dimbu Morii, 700m VIII.1994, leg. Szexely.

**Russian Federation**: 1♂, Altaj, Aktas, 10.-17.VIII.1993, leg. Snizek.

**Serbia**: 1♀, 1♂, NE Pozarevac, 20.VI.2002, leg. Snizek.

**Slovenia**: 1♂, 5 km E Koper, 10.VII.1999, leg. J. Halada.

**Spain**: 1♀, Soria, 18.VI.1964, leg. Linsenmaier.

**Turkey**: 1♂, Belu. lake env., 21.VI.1993, leg. M. Halada; 1♀, Tatvan env., 30.VI.1993, leg. Jirousek.

**Ukraine**: 52♀♀, 58♂♂, Crimea, Simpheropol, 4.VI.1969-5.IX.1999, leg. Gurko; 1♀, 3♂♂, Crimea, Belogorst, 20.V.1987, leg. Gurko; 2♂♂, Crimea, Belogorst, 2.VI.1989, leg. Gurko; 3♂♂, Crimea, Eupatoria, 13.VII.2000, leg. Gurko; 2♂♂, Crimea, 20.VII.1999, leg. Gurko; 1♀, 1♂, Crimea, Sinferopol Anatra, 5.IX.2000, leg. Gurko; 1♀, 1♂, Crimea, Jalta, 10.VII.1998, leg. Gurko; 2♀♀, Crimea, Sinferopol Anatra, VII.2000, leg. Gurko; 3♀♀, Crimea, Eupatoria, 28.VI.-24.VII.1999, leg. Gurko.

The remaining specimens come from Czech Republic (50♀♀, 132♂♂), Germany (1♀, 1♂) and Slovakia (7♀♀, 30♂♂).

***Ectemnius flagellarius* (F. MORAWITZ 1892) [40 ♀♀, 34 ♂♂]**

This species is very similar to *E. crassicornis* and *E. urophori*. The male midbasitarsus is not flattened dorsoventrally in these specimens!

**Turkmenistan**: 37 ♀♀, 16 ♂♂, Ashabat 15 km N, 25.-31.V.1993, leg. M. Halada; 1 ♀, 1 ♂, Sandikatzi env., 3.-13.V.1993, leg. M. Halada; 1 ♀, 2 ♂♂, Tzardjou, 40 km N Denev, 9.VI.1993, leg. M. Halada; 1 ♀, 7 ♂♂, Nebit Dag, 25 km NW Jebel, 28.IV.1993, leg. M. Halada; 1 ♂, Kugit-Angtau mont. Koiten, 8.VI.1993, leg. K. Deneš; 2 ♂♂, Nebit Dag, 1.V.1993, leg. K. Deneš; 3 ♂♂, Ashabat env., 24.VI.1993, leg. M. Halada.

**Uzbekistan**: 2 ♂♂, 50 km W Pahtakor, 40.3°N 67.4°E, 24.V.1994, leg. Ma. Halada.

***Ectemnius flavipennis* (LEPELETIER & BRULLÉ 1835) [1 ♂]**

**Argentina**: 1 ♂, Dto. Colon, E. Rios, IV.1963, leg. Walz.

***Ectemnius fossorius* (LINNÉ 1758) [1 ♀, 11 ♂♂]**

**Kazakhstan**: 1 ♂, Medeo, VII.1987; 1 ♂, Alma Ata, 15 km S Medeo, 13.VII.1981, leg. Kocourek.

**Kirgiziya**: 3 ♂♂, Terek-Sai, 41.5°N 71.1°E, 7.VI.1995, leg. M. Mucka; 1 ♂, Arslanbad, 41.3°N 79.9°E, 12.-13.VI.1995, leg. M. Mucka; 1 ♂, Bishek reg., Malinovka, 1500m, VI.2000, leg. Gurko.

**Russian Federation**: 1 ♀, Sochi, Kaukasus, 18.VI.1966, leg. Kohousek; 1 ♂, Bajkal mer., Bajkal, 1.-7.VIII.1984, leg. K. Deneš.

**Turkey**: 3 ♂♂, N Akseki, 19.VI.1998, leg. M. Halada.

***Ectemnius fossorius manchurianus* TSUNEKI 1976 [1 ♀, 4 ♂♂]**

**Mongolia**: 1 ♀, 3 ♂♂, Ulanbatar, Tuul riv. vall., 12.VII.2003, leg. Halada.

**Russian Federation**: 1 ♂, Primorskiy Kray, Tigrovyy, 20.-26.VII.1990, leg. Snizek.

***Ectemnius guttatus* (Van der LINDEN 1829) [6 ♀♀, 25 ♂♂]**

**Bulgaria** – w.: 1 ♂, Mts. Pirin Begovica, 13.VIII.1993, leg. Mi. Halada.

**Finland**: 2 ♂♂, Hirvensalmi, VII.1968, leg. Ranin; 1 ♂, Kesälathi, 25.VI.1963, leg. Ranin.

**Slovenia**: 1 ♀, Idrija, 16.VII.1963, leg. M. Halada.

The remaining specimens come from Austria (1 ♂), Czech Republic (5 ♀♀, 10 ♂♂) and Slovakia (2 ♀♀, 7 ♂♂).

***Ectemnius hypsae* (De STEFANI PEREZ 1884) [35 ♀♀, 48 ♂♂]**

**Algeria**: 3 ♂♂, Bouira, 12.-17.VI.1971, leg. Hoffer & Horak.

**France**: 1 ♀, Corse, Algajola Dün., 1.-11.VII.1979, leg. Wolf; 1 ♀, Agda (Vias), 4.V.1997, leg. Mucka.

**Greece**: 1 ♀, Preveza env., 25.VI.1997, leg. K. Deneš sen.; 1 ♂, Pelopones, 40 km S Argos, P. Astros, 4.VII.1996, leg. M. Halada; 1 ♂, Pelopones, 20 km N Pilos Marathopoli, 8.VII.1996, leg. M. Halada; 1 ♂, 10 km NE Ioannina, 1.VII.1996, leg. M. Halada.

**Italy**: 1 ♀, Siponto, Apulien, 4.VI.1976, leg. Paré; 4 ♀♀, 10 km N Bar, 10.IX.2000, leg. J. Halada; 1 ♂, Puglia, Taranto env., 25.VIII.1997, leg. J. Halada; 1 ♂, Capri, 30.VI.1972, leg. Padr.

**Morocco**: 6 ♀♀, 5 ♂♂, 10 km E Guelmin, 15.-16.IV.1995, leg. Mi. Halada; 1 ♀, 2 ♂♂, 10 km S Rich, 22.V.1995, leg. Ma. Halada; 3 ♀♀, 1 ♂, 10 km N Rich, 23.V.1995, leg. Mi. Halada; 4 ♂♂,

Bhalil, 10 km NW Sefron, 28.V.1995, leg. Ma. Halada; 2♀, 3♂, Tiznit Oued Massa, 8.V.2003, leg. M. Snizek; 2♀, 4♂, 15 km SE Sefrou, 26.-27.V.1995, leg. Mi. Halada; 1♂, Meknes env., 19.V.1997, leg. Deneš; 1♂, Talmest, 10.V.1995, leg. Ma. Halada; 1♀, 2♂, 40 km S Guercif, 15.-17.V.1995, leg. Ma. Halada; 1♂, Taroudant, 22.IV.1990, leg. M. Halada; 1♂, 30 km E Taroudant, 27.VI.1995, leg. Ma. Halada; 1♂, 43 km N Er Rachidia Oued Ziz, 14.V.2003, leg. M. Halada; 1♂, 30 km N Tafraut, 7.V.1995, leg. Ma. Halada; 2♀, 3♂, Beni-Bassia, 60 km NE Boudnib, 21.V.1995, leg. Ma. Halada; 1♂, 30 km E Midelt, 13.V.1995, leg. Mi. Halada; 1♂, Amouguer, 50 km W Rich, 23.V.1995, leg. Ma. Halada; 2♀, 1♂, Ifrane, 1.-2.VI.1995, leg. Mi. Halada; 1♀, 10 km W Tiznit, 6.V.1995, leg. Mi. Halada; 1♀, 5 km SE Azrou, 31.V.1995, leg. Mi. Halada.

**Portugal**: 1♀, Algarve-E, Feiteira Cachopo, 40 km N Faro, 30.-31.V.1969, leg. Tiefenthaler.

**Spain**: 3♂, Andalusia, Sierra de Maria, 25 km W Lorca, 10.V.2003, leg. J. Halada; 1♂, Andalusia, Sierra Alhamilla, Lucainena, 25.IV.2003, leg. J. Halada; 1♂, Sierra de Espanula, 20 km SW Murcia, 11.V.2003, leg. J. Halada; 1♂, Andalusia, 50 km W Apta, Berja, 21.+28.IV.2003, leg. J. Halada; 1♀, Andalusia, 50 km W Almera, 21.+28.IV.2003, leg. J. Halada; 1♀, Figueres, 2.V.2003, leg. M. Halada; 1♀, Pr. Murcia, Sierra d. Viento b. Lorca, 500m, 1.V.1981, leg. Schacht; 1♀, Costa Brava, Platja de Aro, 8.-14.IX.1991, leg. Deneš.

**Tunisia**: 1♂, Zaghouan Mts., 14.V.1993, leg. J. Batelka; 1♀, M'saken, 20.-21.IV.1998, leg. K. Deneš jun.

### *Ectemnius krieckbaumeri* (KOHLE 1879) [2♀, 5♂]

**France**: 1♂, Provence, Montagne de Lure, Lauzon vall. Cruis, 500m, 6.-8.VI.1981, leg. W. Schacht.

**Turkey**: 2♀, 1♂, N Akseki, 16.VI.1998, leg. M. Halada; 2♂, 10 km N Gerkus, 5.VI.1998, leg. M. Halada; 1♂, 40 km E Nue Cometek, 29.V.1996, leg. M. Halada.

### *Ectemnius kvak* MARSHAKOV 1976 [9♂]

**Kazakhstan mer.**: 1♂, Issik 3 km S, 22.-23.VI.1992, leg. K. Deneš.

**Kirgiziya**: 3♂, Tash-Arik, 11 km E Talas, 4.VII.1992, leg. M. Halada; 1♂, Arslanbad 41.3°N 72.9°E, 12.-13.VI.1995, leg. M. Halada; 1♂, Ala-Buka, 41.5°N 71.2°E, 6.VI.1995, leg. J. Halada; 1♂, Mt. R. Ala-Archa riv., Ooru-Say, 1650m, VII.2000, leg. V. Gurko; 1♂, Tchaikal Mt. R., Khodzha-Ata riv. canyon, 41°50'N 71°56'E, 1400m, 23.VIII.1998, leg. I. Makogonova; 1♂, Oshskaya Obl., Distr. Dchon-Alajsky, Alai-Geb., Tal der Kok-Suu, 39°37'34"N 71°58'36"E GPS, 2700-2800m, 20.-21.VII.1998, leg. H. & R. Rausch.

### *Ectemnius lapidarius* (PANZER 1804) [121♀, 219♂]

**Bulgaria**: 1♂, Sandanski, 18.V.1979, leg. Kocourek; 1♂, Sandanski, 27.VI.1961, leg. M. Kocourek; 1♀, Rodopi Zdravec, 5.VII.1997, leg. Zaykov; 1♀, Melnik, 25.VI.1978, leg. Padr; 2♀, V Sipka, VII.1969, leg. Deneš; 1♀, Slincev Brjag, 17.VII.1968, leg. Kocourek.

**Finland**: 2♂, Hirvensalmi, VII.1968, leg. Ranin; 5♀, 16♂, Helsinki Villinki, 18.VII.-12.VIII.1962, leg. Ranin; 1♂, Helsinki, 9.VI.1963, leg. Ranin.

**Kazakhstan**: 1♂, Madse, VII.1978; 1♀, Fabritchny 40 km E Alma Ata, 23.VI.1992, leg. Jirousek.

**Kirgiziya**: 4♂, Bishek reg., Malinovka, 1500m, VI.2000, leg. Gurko; 1♂, Mt. Rg. Malinkovka, 1650m, 10.V.2000, leg. Gurko; 1♂, Kirgiziya Mts., Ala-Archa nv., Kashka-Suu, 1650m, VII. 2000, leg. Gurko; 1♂, Issyk-Kulskaya Obl., S Teplokyochenaka, 42°47'N 78°31'E, 2000-2300m, 18.-20.VI.1995, leg. H. & R. Rausch; 1♂, Arslanbad, 41.3°N 72.9°E, 12.-13.VI.1995, leg. M. Mucka; 1♀, E Terskei Mt. R. Arashan, 2000m, 42°28'N 78°32'E, 23.VIII.1999, leg. Zonstein; 1♀, Talasskaya Obl., Talas Alatau, Chichkan riv., 42°07'N 72°78'E, 1600-1800m, leg. H. & R. Rausch, P. Ressler.

**M o n g o l i a** : 1♂, Ulanbatar, Tuul riv. vall., 12.VII.2003, leg. J. Halada.

**R o m a n i a** : 1♂, Brasov Timis Jos, 700m, 28.VII.1994, leg. Szexely; 1♂, Brasov, Sacele, 650m, 30.VIII.1994, leg. Szexely; 1♂, Brasov, Sacele, 650m, 16.VII.1994, leg. Szexely; 1♂, Secu, Resta, 1000m, 2.VIII.1999, leg. Snizek; 1♂, Cozia, W Turnu Severin, 26.VI.2002, leg. M. Halada; 1♀, Brasov, Sacele, 650m, 2.VIII.1994, leg. Szexely; 1♀, Brasov, Sacele, 650m, 9.VI.1994, leg. Szexely; 2♀, Resita, Anina, 4.VI.2000, leg. Snizek; 1♀, W Deva, 23.V.2002, leg. M. Halada; 1♀, Transylvania, Fiser, 1.VIII.1968, leg. Padr; 1♀, Restia, 2.VIII.1999, leg. Snizek.

**S l o v e n i a** : 1♂, Idrija, 16.VII.1993, leg. M. Halada.

**U k r a i n e** : 4♀, 7♂, Crimea, Simpheropol, 10.VI.-8.VIII.1999, leg. Gurko; 1♂, Mirgorod, 13.VII.1985, leg. Deneš; 1♀, Crimea, Simferopol, Anatra, VII.2000, leg. Gurko.

The remaining specimens come from Czech Republic (88♀, 162♂), Germany (3♂), Slovakia (7♀, 9♂) and Switzerland (1♂).

### ***Ectemnius lituratus* (PANZER 1804) [46♀, 86♂]**

**B u l g a r i a** : 1♀, Rodopi, Studenec, 27.VII.1997, leg. Zaykov.

**C r o a t i a** : 1♀, Istria, Laborika, 20.VII.2002, leg. M. Halada.

**F r a n c e** : 4♀, Vauxaillon, 25.V.1926, leg. H. Hermann.

**G r e e c e** : 1♀, Euböa, Dirfis, 1000m, 4.VIII.1993, leg. H. Malicky.

**I t a l y** : 1♂, Toscana, 20 km NE Firenze, 5.VI.2000, leg. J. Halada.

The remaining specimens come from Austria (1♂), Czech Republic (29♀, 57♂), Germany (1♀) and Slovakia (9♀, 27♂).

### ***Ectemnius martjanowi* (F. MORAWITZ 1892) [3♀, 7♂]**

**C h i n a** : 1♀, 2♂, Yunnan prov., Heishui, 35 km N Lijiang, 27°13'N 100°19'E, 1.-19.VII.1992, leg. S. Becvar; 1♂, Yunnan prov., Heishui, 35 km N Lijiang, 27°13'N 100°19'E, 18.VI.-4.VII.1993, leg. S. Becvar.

**M o n g o l i a** : 1♂, Ulanbatar, Tuul riv. vall., 12.VII.2003, leg. J. Halada.

**R u s s i a n F e d e r a t i o n** : 1♀, 2♂, Bajkal mer., Nikola, 1.-7.VIII.1984, leg. K. Deneš; 1♀, 1♂, Bajkal mer., Bajkal, 1.-7.VIII.1984, leg. K. Deneš.

### ***Ectemnius massiliensis* (KOHLE 1883) [14♀, 40♂]**

**B u l g a r i a** : 1♀, 2♂, Slancev Brjag, 28.VI.-14.VII.1971, leg. Padr; 1♀, Slancev Brjag, 25.VII.1968, leg. Padr; 1♂, Trakia, Trud, 20.VIII.1997, leg. Zaykov; 1♂, Slancev Brjag, 10.VI.1972, leg. Kocourek; 1♂, Nessebr, 30.VI.1982, leg. Kocourek.

**F r a n c e** : 1♂, Basses Alpes, St. Laurent-de-Verdon, 550m, 11.-19.IX.1979, leg. W. Perraudin.

**M a k e d o n i j a** : 1♀, Lake Dojran, 10.VII.1968, leg. Padr.

**P o r t u g a l** : 4♀, 3♂, Algarve, Hortas do Tabual, 5 km SE Vila do Bispo, 16.-18.V.1995, leg. J. Gusenleitner; 4♀, Algarve, Carrapateira, 20 km SSW Aljezur, 13.-14.V.1995, leg. J. Gusenleitner; 1♂, Ost-Algarve, Feiteira b. Cachopo, 40 km N Faro, 30.-31.V.1996, leg. Tiefenthaler.

**T u r k e y** : 1♀, 1♂, Bitlis, Nemrut Dag, 2000m 16.VIII.1991, leg. M. Halada; 1♀, 2♂, Konya, Mt. Aydos/Eregli, 1600m, 7.VIII.1991, leg. M. Halada; 2♂, Bayburt, Gümüşhane, 1600m, 22.VIII.1991, leg. M. Halada; 3♂, Gevas/Van Gölü, 29.VI.1993, leg. Jirousek & M. Halada; 2♂, 30 km W Gaziantep, 30.V.1989, leg. M. Halada; 2♂, 10 km W Urgup, 15.VI.1998, leg. M. Halada; 1♂, Horasan, 18 km E Delibaba, 25.VI.1993, leg. Jirousek; 2♂, 40 km NE Muradiye, 2200m, 5.VII.2000, leg. M. Halada; 2♂, 30 km N Erdemli Aslanli, 17.VI.1998, leg. M. Halada; 2♂, E Erzurum, 2000m, 6.VII.2000, leg. M. Halada; 1♂, Seydisehir, Teke Gec., VII.2000, leg. Snizek; 2♂, N Akseki, 19.VI.1998, leg. M. Halada; 1♂, 20 km E Gurun,

Mezikiran Gecidi, 10.VII.1997, leg. M. Halada; 4♂♂, Pr. Hakkari, Suvani Halil Pass, SE Beytisebap, 2300m, 2.VIII.1982, leg. W. Schacht; 1♂, Pr. Hakkari, Sat. Dag, Vargös SW Yükksekov, 1700m, 4.-8.VIII.1983, leg. W. Schacht; 2♂♂, Pr. Hakkari, Suvani-Halil-Pass, E Beytisebap, 2300m, 3.VIII.1982, leg. K. Wamcke; 1♀, Camardi (Nigde), 13.VII.1997, leg. Ma. Halada.

***Ectemnius meridionalis* (A. COSTA 1871) [109♀, 136♂♂]**

**A l g e r i a :** 1♀, Bouira, 12.-14.VI.1971, leg. Hoffer & Horak.

**B u l g a r i a :** 1♀, 4♂♂, Slancev Brjag, 20.VII.-5.VIII.1965, leg. Padr; 3♂♂, Slancev Brjag, 28.VI.-14.VII.1971, leg. Padr; 1♀, Slancev Brjag, 25.VII.1968, leg. Padr; 2♂♂, Kaliakra, 30.VI.1979, leg. Tkalčú; 1♀, 15.VII.1977, leg. Tkalčú; 1♂, Sandanski, 7.VII.1990, leg. B. & O. Tkalčú; 1♂, Sandanski, 20.VI.1990, leg. B. & O. Tkalčú; 2♂♂, Varna-Galata, 49.VII.1979, leg. Tkalčú; 1♂, Balcik-Tuzlata, 11.VII.1979, leg. Tkalčú; 1♂, Albano, 13.VII.1977, leg. Tkalčú; 1♂, Albano, 18.-29.VI.1986, leg. M. Halada; 1♂, Melnik, 13.VIII.1993, leg. M. Halada; 1♂, E Slancev Brjag, 10.VI.1972, leg. Kocourek; 1♂, Slancev Brjag, 7.VIII.1968, leg. Kocourek; 1♂, Slancev Brjag, 4.VIII.1968, leg. Kocourek; 1♂, Slancev Brjag, 17.VIII.1970, leg. Kocourek; 1♂, Sandanski, VI.1969, leg. Kocourek; 1♂, Nessebr, 2.VII.1982, leg. Kocourek; 1♀, Panorama (Zl. pjasóci), 27.VI.1976, leg. Tkalčú; 1♂, Slancev Brjag, 28.VI.-14.VII.1971, leg. Padr.

**C r o a t i a :** 5♂♂, Istria, Laborika, 20.VII.2002, leg. Ma. Halada; 1♀, Istria, SW Vodnjan, 18.VII.2002, leg. Ma. Halada.

**C z e c h R e p u b l i c :** 1♂, Moravia, Kamenican/Hr., VII.1963, leg. Kocourek; 1♂, Moravia, Ladna, 16.VI.1977, leg. Kocourek; 2♀♀, Moravia, Lhota u Paci. env., 7.VI.1994, leg. K. Deneš; 1♀, Moravia, 30 km S Brno Popice, 12.VIII.2000, leg. Snicek; 1♀, Obelce, 7.-13.VI.1973, leg. Padr; 1♀, Streda n/Bodrog, 26.VI.1977, leg. Padr.

**F r a n c e :** 1♂, Corse, Algajola Dün., 1.-11.VII.1979, leg. Wolf.

**G r e e c e :** 1♀, 2♂♂, Pelopones, 20 km N Pilos, Marathopolis, 8.VII.1996, leg. Ma. Halada; 1♂, Pelopones, 40 km N Tripoli Scotini, 3.VII.1996, leg. Ma. Halada; 1♀, 2♂♂, Preveza env., 25.VI.1997, leg. K. Deneš; 1♂, Epiros gegenüber Ori Lakmos, 39°43'N 20°00'E, 660m, 12.VI.1988, leg. Vogtenhub; 1♂, Sithonia: Sikia, 23.VIII.1978, leg. K. Wamcke; 1♀, Pelopones, 40 km S Argos, P. Astros, 4.VII.1996, leg. Ma. Halada.

**I t a l y :** 1♀, Sardegna N, Nuoro env., 25.-26.VI.2000, leg. J. Halada.

**J o r d a n :** 1♂, Jarash env., 1.V.1996, leg. M. Halada; 5♀♀, 1♂, N Shuna, 20.-22.IV.1996, leg. M. Halada; 4♀♀, 9♂♂, North Shuna, 29.-30.IV.1996, leg. Ma. & Mi. Halada; 2♂♂, Jordan Valley, Dayr Alla, 27.IV.1996, leg. Mi. Halada; 1♂, Jordan Valley, S Shuna, 25.-26.IV.1996, leg. Mi. Halada.

**K a z a k h s t a n :** 8♀♀, 5♂♂, Dzambul env. (60 km), Makbal Kirgiz chrebet, 4.VI.1980, leg. Padr; 1♂, Dzambul env., Kara Tau, Pass Ujuk, 1000m, 3.VI.1980, leg. Padr; 1♂, 10 km E Djambul, 31.V.1994, leg. Ma. Halada; 1♂, Malaysari 144 km N Alma-Ata, 21.VI.1992, leg. Jirousek.

**K i r g i z i y a :** 1♂, Mt. Rg., Malinovka, 1650m, 10.V.2000, leg. Gurko; 1♂, Mt. Rg., Ala-Archa riv., Uzum-Bulat, V.2000, leg. Gurko; 1♂, Ala Buka, 41.5°N 71.2°E, 6.VI.1995, leg. J. Halada; 1♂, Frunse env. (10 km), Con Arik, 24.-28.V.1980, leg. Padr.

**M o r o c c o :** 1♀, 2♂♂, El-Menzel, 30 km E Sefrou, 29.V.1995, leg. Ma. Halada; 1♀, 2♂♂, Amouguer, 50 km W Rich, leg. Ma. Halada; 2♂♂, Ifrane, 1.-2.VI.1995, leg. Ma. Halada; 3♀♀, 2♂♂, Bhalil, 10 km NW Sefrou, 28.V.1995, leg. Ma. Halada; 2♀♀, 1♂, 5 km SE Azrou, 31.V.1995, leg. Ma. Halada; 1♀, 10 km N Rich, 23.V.1995, leg. Mi. Halada.

**R o m a n i a :** 1♀, Wald Hagieni SE Dobrogea, 70m, leg. Rakosy.

**S e r b i e :** 1♀, 2♂♂, NE Pozarevac, 20.VI.2002, leg. Snizek.

**S l o v a k i a :** 1♂, Sturovo, 10.VI.1977, leg. Kocourek; 1♂, Sturovo, VII.1968, leg. Kocourek; 1♂, Sturovo, VI.1969, leg. Kocourek; 1♂, Sturovo, 6.VI.1964, leg. Padr; 2♂♂, Sturovo, 8.VIII.1965, leg. Kocourek; 1♀, Sturovo, 7.VIII.1970, leg. Padr; 1♂, Sturovo, VIII.1965, leg. Kocourek.

**S p a i n :** 1♀, 1♂, Andahucia, Sierra Alhamilla Lucainena, 25.IV.2003, leg. J. Halada.

- S y r i a :** 5♀, 7♂, 20 km NE Latakia, 25.V.1996, leg. M. Halada; 1♂, 50 km SE Suwayda Anata, 1996, leg. Ma. Halada; 1♂, Faouar, 35°55'N 33°13'E, 6.V.2001, leg. Plass; 1♀, 40 km NE Damascus, 22.V.1996, leg. Ma. Halada; 1♀, 30 km Suwayda Dibbin, 15.-17.V.1996, leg. Ma. Halada; 1♀, Damascus, 22.V.1996, leg. Mi. Halada; 1♀, 40 km W Homs, 18.VIII.2000, leg. M. Halada; 1♀, Dara Wadi Al Marir, 20.V.1995, leg. Nemec; 1♀, Tartus, 25.V.1996, leg. Ma. Halada.
- T a d z j i k i s t a n :** 2♂♂, Tachtaul/Dusanbe 60 km, 22.IV.1978, leg. Dvorak; 1♂, Dusanbe env., Javroz, 1.V.1977, leg. Niedl; 1♂, Tachtaul/Dusbane env., 29.IV.1977, leg. Niedl; 1♂, Babatag Mts., 30.IV.1977, leg. Svozil; 1♀, Tashkent 40 km E Circik, 4.VII.1981, leg. Kocourek.
- T u r k e y :** 1♀, 8♂♂, 15 km E Malatya, 27.VI.2000, leg. M. Halada; 1♀, 4♂♂, 25 km E Golbasi, 7.VI.1998, leg. Ma. Halada; 1♂, 10 km N Konya, 14.VI.2000, leg. M. Halada; 1♂, E Erzurum, 2000m, 6.VII.2000, leg. M. Halada; 1♀, 1♂, Harbie, Antakya, 17.VI.2000, leg. M. Halada; 2♂♂, Kabahaydar Urfa, 2.VI.1998, leg. Ma. Halada; 1♂, Hop Gecidi Mardin, 6.VI.1998, leg. Ma. Halada; 1♂, Halfeti (Birecik), 31.V.1998, leg. Ma. Halada; 1♂, Eskisehir Inönu, 800m, 1.VIII.1991, leg. M. Halada; 1♂, 30 km E Nusaybin, 6.VI.1998, leg. Ma. Halada; 2♀♀, 1♂, 20 km E Van, 5.VII.1997, leg. Ma. Halada; 3♀♀, 4♂♂, Nemrut Dagı, Karadut, 2.VII.1993, leg. Mi. Halada; 3♀♀, 1♂, Gevas/Van Gölü, 29.VI.1993, leg. K. Deneš & Mi. Halada; 2♀♀, Kahramanmaraş Pazarcık, 24.VI.2000, leg. M. Halada; 1♀, Tatvan env., 30.VI.1993, leg. Mi. Halada; 1♀, Seydisehir, Teke Gec., VII.2000, leg. Snizek; 1♀, Silifce, 21.V.1995, leg. K. Deneš; 1♀, Haifeti env., 3.-5.V.1994, leg. Mi. Halada; 1♀, 40 km E Mut Comelek, 18.VI.1997, leg. Ma. Halada; 1♀, Eregli, 13.VII.1987, leg. Ma. Halada; 1♀, Izmir env., 21.VI.1998, leg. J. Halada; 1♀, Kahraman Maras 40 km SE, 10.VI.1998, leg. Ma. Halada.
- T u r k m e n i a :** 15♀♀, 5♂♂, Ashabat, 40 km W Firyuza, 6.VI.1993, leg. M. Halada; 6♀♀, 1♂, Ashabat env., 10.VI.1993, leg. M. Halada; 1♀, Firjuza/Kopet-dag, 27.IV.1977, leg. Niedl; 5♀♀, Ashabad env., 15.V.1993, leg. M. Halada.
- U k r a i n e :** 2♀♀, 1♂, Crimea, Eupatoria, 24.VII.1999, leg. Gurko; 1♀, Crimea, Simpheropol, 8.VIII.1999, leg. Gurko; 1♀, Crimea, Eupatoria, 13.VII.2000, leg. Gurko; 1♀, Crimea, Kerch, 20.VI.1996, leg. Gurko.
- U z b e k i s t a n :** 1♂, Fergans env. (30 km), Kadamzaj, 21.-22.V.1980, leg. Padr; 1♂, Aman-Kutan, Samarkand, 1200m, 2.V.1977, leg. Svozil; 1♂, Vil Dzhizak, Turkest. Khrebet, 5 km S Douba, 39°41'19"N 68°28'55"E GPS, 1500-1850m, 13.VI.1997, leg. H. & R. Rausch; 1♂, Yangiabad, 41.2°N 70.1°E, 12 km N Angren, 8.-10.1994, leg. Ma. Halada.

### ***Ectemnius nigratarsus* (HERRICH-SCHAEFFER 1840) [3♀♀, 2♂♂]**

- C h i n a :** 1♂, Yunnan, Lijiang, 11.-15.VI.1995, leg. E. Kucera.
- C z e c h R e p u b l i c :** 1♂, Moravia, Strachotin, 1978, leg. K. Deneš; 2♀♀, Moravia, Palava – Obora pramen, 15.VIII.1988, leg. Z. Padr.
- G e o r g i a :** 1♀, Gagra env., VI.1976, leg. K. Deneš.

### ***Ectemnius pacuarius* LECLERCQ 1972 [1♂]**

- E c u a d o r :** 1♂, 80 km NW Quito, Pacto, 1300m, 26.II.-2.III.2002, leg. M. Halada.

### ***Ectemnius persicus* (KOHLE 1888) [9♀♀, 1♂]**

- T u r k e y :** 2♀♀, Pr. Hakkari, Suvani Halil Pass, SE Beytisebap, 2300m, 2.VIII.1982, leg. W. Schacht; 2♀♀, Pr. Hakkari, Suvani-Halil-Pass, E Beytüssebap, 2300m, 3.VIII.1982, leg. K. Warneke; 1♀, Turkey-c., 20 km E Gurun, Mezikiran Gecidi, 10.VII.1997, leg. Ma. Halada; 1♀, Turkey-or., Van Town bor., 28.VI.1993, leg. K. Deneš; 1♀, Turkey-east, 20 km W Van, 5.VII.1997, leg. Ma. Halada; 1♀, Turkey-east, 50 km S Kars Pasli, 1.VII.1997, leg. Ma. Halada; 1♀, Turkey-or., Gevas/Van Gölü, 29.VI.1993, leg. Mi. Halada; 1♂, Zor Dagı, Sulucan env., 25.VI.1993, leg. Mi. Halada.

***Ectemnius radiatus* (PÉREZ 1905) [1 ♀]**

**J a p a n** : 1 ♀, Osaka?, 24.VI.1956.

***Ectemnius rubicola* (DUFOUR & PERRIS 1840) [86 ♀ ♀, 95 ♂ ♂]**

**B u l g a r i a** : 2 ♀ ♀, Rodopi, Galabovo, 15.VII.1996, leg. Zaykov; 2 ♀ ♀, 1 ♂, SW-Vlahi, 14.VIII.1993, leg. M. Halada; 1 ♂, Kresno, 16.V.1979, leg. Kocourek; 1 ♂, v. Sipa, VII.1969, leg. Deneš; 1 ♂, Albena, 18.-29.VI.1986, leg. J. & M. Halada; 1 ♂, Harmanli, 9.VI.1974, leg. Marak; 1 ♂, Trakia, Volvodino, 5.IX.1997, leg. Zaykov; 1 ♂, Rodolpi, Zdravec, 5.VII.1997, leg. Zaykov; 1 ♂, Plovdiv, 20.VIII.1997, leg. Zaykov; 1 ♂, SW-Melnik, 13.VII.1993, leg. M. Halada; 1 ♂, Slancev Brjag, VI.1972, leg. Kocourek; 1 ♂, Sandanski, 1.-8.VI.1967, leg. Kocourek.

**C r o a t i a** : 1 ♀, 2 ♂ ♂, Istria, Laborika, 20.VII.2002, leg. M. Halada.

**F i n l a n d** : 1 ♂, Hirvensalmi, VII.1968, leg. O. Ranin.

**R o m a n i a** : 1 ♀, Brasov Sacsle, 650m, 3.VIII.1994, leg. K. Deneš; 1 ♀, Mamgia, VIII.1972, leg. J. Halada; 1 ♂, SW Restia, 2.VIII.1999, leg. M. Snizek.

**S e r b i a** : 1 ♀, NE Pozarevac, 20.VI.2002, leg. M. Snizek.

**T u r k e y** : 1 ♀, Pr. Hakkari, Habur Deresi-Tal, S Beytiseban, 1100m, 10.VIII.1963, leg. W. Schacht.

**U k r a i n e** : 1 ♀, Zaporezi, 5.VIII.1985, leg. J. Halada; 1 ♀, Simferopol, Anatra, VII.2000, leg. Gurko; 12 ♀ ♀, 19 ♂ ♂, Simpheropol, 1955-1999, leg. Gurko.

The remaining specimens come from Czech Republic (49 ♀ ♀, 54 ♂ ♂), Germany (2 ♂ ♂), Hungary (4 ♀ ♀, 1 ♂) and Slovakia (10 ♀ ♀, 3 ♂ ♂).

***Ectemnius rubicola nipponis* TSUNEKI 1960 [1 ♀]**

**J a p a n** : 1 ♀, Oshima, Wakayama, 4.-5.VIII.1957, leg. Hayashi.

***Ectemnius ruficornis* (ZETTERSTEDT 1838) [84 ♀ ♀, 111 ♂ ♂]**

**B u l g a r i a** : 1 ♀, meat. Piria mem. ecc., 1000-1500m, 2.VIII.1982, leg. J. Halada.

**R o m a n i a** - S W: 1 ♂, 10 km E Anina, 28.VIII.2002, leg. M. Halada.

**U k r a i n e** : 1 ♀, Skole, Verecky pr., 15.VII.1985, leg. J. & M. Halada.

The remaining specimens come from Czech Republic (73 ♀ ♀, 86 ♂ ♂), Germany (6 ♀ ♀, 11 ♂ ♂) and Slovakia (3 ♀ ♀, 13 ♂ ♂).

***Ectemnius rugifer* (DAHLBOM 1845) [6 ♀ ♀, 16 ♂ ♂]**

**B u l g a r i a** : 1 ♀, 1 ♂, Rodopi, Studeneo, 25.VII.1997, leg. Zaykov; 1 ♂, Sandanski, 4.VI.1978, leg. Kocourek; 2 ♂ ♂, Slancev Brjag, VII.1961, leg. Kocourek; 1 ♀, Sandanski env., 27.VI.1961, leg. Kocourek.

**G r e e c e** - w.: 1 ♂, Preveza env., 25.VI.1997, leg. K. Deneš sen.

**S l o v a k i a** : 2 ♂ ♂, Levice, VIII.1961, leg. Kocourek; 1 ♂, Rem Hamry, 17.VII.1959, leg. Kocourek.

**T u r k e y** : 1 ♀, 2 ♂ ♂, Konya, Mt. Aydos/Eregli, 1600m, 7.VIII.1991, leg. M. Halada; 1 ♀, Halfeti (Birecik), 31.V.1998, leg. Ma. Halada; 1 ♀, N Akseki, 19.VI.1998, leg. Ma. Halada.

**U k r a i n e** : 1 ♂, Crimea, Jalta, 14.VII.1997, leg. Gurko; 1 ♂, Eupatoria, 13.VII.2000, leg. Gurko; 1 ♂, Simpheropol, 12.VII.1996, leg. Gurko; 1 ♂, Simpheropol, 8.VIII.1999, leg. Gurko; 1 ♂, Simpheropol, 20.VI.1999, leg. Gurko; 1 ♂, Simpheropol, 5.VIII.1999, leg. Gurko; 1 ♀, Crimea, Sipheropol, 15.VII.1999, leg. Gurko.



***Ectemnius schlettereri* (Kohl 1888) [3 ♀ ♀, 1 ♂]**

**C h i n a** – **c e n t .**: 1 ♀, Xiexian, Zhongtiao Shan mt., 34.8°N 111.6°E, 22.-24.V.1996, leg. J. Halada.

**J a p a n**: 1 ♀, Niigata, Shibata-city, 23.VIII.1963, leg. H. Itami; 1 ♀, Niigata pref., Shidaihamu, 1.VIII.1965, leg. Itami.

**K o r e a** – **b o r .**: 1 ♂, Kumgangson Mts., 18.-26.V.1988, leg. Janos.

***Ectemnius sexcinctus* (FABRICIUS 1775) 20 ♀ ♀, 31 ♂ ♂]**

**B u l g a r i a**: 1 ♀, Sandanski, 14.VIII.1993, leg. M. Halada.

**K a z a k h s t a n**: 1 ♀, Alma Ata, 1.VI.1994, leg. J. Halada.

**K i r g i z i y a**: 1 ♀, 1 ♂, E Terskei, Mt. R. Arashan, 2000m, 42°28'N 78°32'E, 23.-28.VIII.1999, leg. Zonstein; 1 ♀, Talasskaya Obl., Khr. Kek-lyrim Too, Toktogut-Stausee, 41°47'N 72°59'E, 950m, 5.-6.VI.1995, leg. H. & R. Rausch, P. Ressler; 1 ♂, Kizil-kiya, 40.2°N 72.1°E, 15.V.1994, leg. M. Halada; 1 ♂, Mt. Rg. Malinovka, 1600m, 10.V.2000, leg. Gurko.

**T a d z h i k i s t a n**: 1 ♂, Pond'ikent, VI.1982, leg. Padr.

**T u r k e y**: 1 ♀, Agri env., 27.VI.1993, leg. Jirousek; 1 ♀, 2 ♂ ♂, Konya, Mt. Avdos/Eregli, 1600m, 7.VIII.1991, leg. M. Halada; 1 ♂, Ankara 80 km SE, Cogun lake, 22.VI.1993, leg. K. Deneš.

The remaining specimens come from Czech Republic (14 ♀ ♀, 23 ♂ ♂) and Germany (1 ♂).

***Ectemnius shimoyamai* TSUNEKI 1958 [1 ♀]**

This very rare species is characterized by inner orbits subparallel, very slightly convex below, and very distinct and deep frontal impressions. Therefore it does not run to *Ectemnius* within the usual keys of Crabroninae genera. Until now only few specimens from Japan are known.

**C h i n a**: 1 ♀, Shaanxi, Quinling mts., XUNYANGBA (6 km E), 1000-1300m, 23.V.-13.VI.1998, leg. I.H. Marshall.

***Ectemnius spinipes tetracanthus* PÉREZ 1905 1 ♂]**

**M o n g o l i a**: 1 ♂, Ulanbatar, Tuul riv. vall., 12.VII.2003, leg. J. Halada.

***Ectemnius urophori* (RADOSZKOWSKI 1877) [32 ♀ ♀, 43 ♂ ♂]**

**K a z a k h s t a n**: 2 ♀ ♀, Dzambul env. (60 km), Makbal, Kirgiz, Chrebet, 4.VI.1980, leg. Padr; 1 ♀, Alma Ata env. – Axaj, 29.V.1980, leg. Padr; 1 ♀, Dzambul env., Kare Tau, prusnyk Ujuk, 1000m, leg. Padr; 1 ♀, 1 ♂, Issyk, 1756m, Zailij, Ala Tau, 29.V.1974, leg. Niedl; 1 ♀, Alma Arasan/Alma Ata env., 28.V.-30.V.1974, leg. Niedl; 1 ♀, 3 ♂ ♂, Chagir, 42.2°N 68.8°E, 40 km S Aris, 6.V.1994, leg. J. Halada; 1 ♂, Alma-Ata, Medeo, 27.VI.1995, leg. J. Halada.

**K i r g i z i y a**: 1 ♀, 1 ♂, Tchu vall., 10 km NNE Telek, 550m, 43°10'N 74°03'E, 19.VI.2000, leg. Zonstein; 1 ♀, Kashkasu, 27 km S Bishkek, 30.VII.2000, leg. Makogonova; 1 ♀, Con Aryk (Frunze), 900m, 6.VII.1983, leg. Talku; 1 ♀, Osh area, 25 km S Osh Aravan, VI.2000, leg. Gurko; 1 ♀, Kizil-kiya, 20.2°N 72.1°E, 15.V.1994, leg. J. Halada; 1 ♀, Dzahal-Abad area Say, VI.2000, leg. Gurko; 2 ♂ ♂, Kirgiziya Mts., Ala-Archa riv., Kashka-Suu, 1600m, VII.2000, leg. Gurko; 1 ♂, Kizil-kiya, 40.2°N 72.1°E, 15.V.1994, leg. K. Deneš; 1 ♂, Tchujskaja, Distr. Issyk-Ata, Tal des Flusses Kegety, 2050-2350m, 20 km SSW Kegety, 40°32'N 75°07'E, 7-8.VII.1996, leg. H. Rausch; 1 ♂, Issyk-Kul lake ost. Teplojutchenska rg., 1800m, VIII.2001, leg. Gurko; 1 ♂, Tshu vall., Ac-Suu riv., Tjulek, 500m, 4.VII.1999, leg. Gurko; 3 ♀ ♀, 9 ♂ ♂, Ochskaya Obl., Distr. Alajsky, S Kok-Suu, Bachtal, 39°40'28"N 73°45'57"E, GPS, 3000m, 24.-25.VII.1998, leg. H. & R. Rausch; 2 ♂ ♂, Dzhalai-Abadskaya Obl., Tschatkal-Geb., Edzhany-Bazar, 41°40'24"N

70°54'48''E, GPS, 2150-2700m, 10.-11.VII.1998, leg. H. & R. Rausch; 1♂, Alai Mt. R. Jkizjak, Kok-Suu riv. bass., VII.2000m, leg. Gurko; 1♂, Zshatkal Mt. R., Khodzha-Ata r., 41°50'N 71°56'E, 5.VII.2000, leg. Makogonova.

**T a d s h i k i s t a n** : 1♀, Fachrobd 1200m, Dushanbe env., 20.V.1974, leg. K. Deneš; 1♀, 1♂, W Pamir Mts., 30 km N Rushan, 3500m, VII.2000, leg. Gurko; 1♂, Pendzikend, 20 km E Resen Pojom, 29.VI.1981, leg. Kocourek; 2♀♀, 1♂, Tashkent, 40 km E Circi, 4.VII.1981, leg. Kocourek; 1♀, Tashkent, Corcik 40 km E, 4.VII.1981, leg. Kocourek; 1♂, Pendzikend, 20 km E Resen Pojom, 29.VI.1981, leg. Kocourek.

**U z b e k i s t a n** : 5♀♀, 7♂♂, Samarkand env., 19-21.V.1994, leg. J. Halada; 2♀♀, 1♂, 5 km W Djizak, 39.9°N 67.5°E, 23.V.1994, leg. J. Halada; 1♀, 1♂, Fergans env. (30 km), Kadamzaj, 21.-22.V.1980, leg. Padr; 1♀, Samarkand env., 35. Km N Aman Kutan, 30.VI.1981, leg. Kocourek; 1♀, Kysyl-Kyr, Buchara, 28.IV.1976, leg. Strejček; 1♂, 50 km W Pahtakor, 40.3°N 67.4°E, 24.V.1994, leg. Ma. Halada; 1♂, Akcza, 41.1°N 70.0°E, 20 km SW Angren, 7.V.1994, leg. Ma. Halada; 1♂, Vil. Tashkend, Ugarnisches-Geb., 5 km WSW Pakem, 41°54'54''N 70°20'28''E GPS, 1250m, 17.-19.VI.1997, leg. H. & R. Rausch; 1♂, Vil. Tashkend, Nuratau-Geb. Hayat-Saj, S Hayat, 40°31'37''N 66°46'28''E GPS, 950-1100m, 21.-22.V.1997, leg. H. & R. Rausch; 1♂, Aman Kutan/Samarkand env., 1200m, 16.V.-18.V.1974, leg. K. Deneš.

This species is very similar to *E. crassicornis*. Flagellomere I of males of *E. urophori* is in most specimens distinctly longer than in *E. crassicornis*. Maybe *E. urophori* is a variation of *E. crassicornis*.

### ***Encopognathus* KOHL 1897 [18♀♀, 7♂♂]**

#### ***Encopognathus braueri* (KOHL 1897) [2♀♀, 1♂]**

**K e n y a** : 1♀, 1♂, Voi (Tsavo) env., 22.XI.-2.XII.1996, leg. Mi. Halada; 1♀, Voi, 10.XII.1999, leg. M. Snizek.

#### ***Encopognathus browni* R. TURNER 1917 [1♀]**

**N a m i b i a** : 1♀, Rundu, 29.I.1993, leg. J. Gusenleitner.

#### ***Encopognathus gombaki* LECLERCQ 1963 [1♀]**

**L a o s** – **N** : 1♀, (Oudomxai), Oudom Xai (17 km NEE), 20°45'N 102°09'E, 1100m, 1.-9.V.2002, leg. Vit. Kuban.

#### ***Encopognathus grivellus* LECLERCQ 1977 [3♀♀]**

**M a l a y s i a** : 3♀♀, Pahang, 30 km NE Raub, Lata Lembik, 3°56'N 101°38'E, 300m, IV.-V.2002, leg. Jendek & Sausa.

#### ***Encopognathus liongoi* LECLERCQ 1986 [1♀, 1♂]**

**K e n y a** : 1♀, 1♂, Voi (Tsavo) env., 22.XI.-2.XII.1996, leg. Mi. Halada.

#### ***Encopognathus rhodesianus* (ARNOLD 1932) [2♀♀, 1♂]**

**Z i m b a b w e** : 1♀, 1♂, 50 km S Bulawayo Matobo, 3.-5.XII.1998, leg. J. Halada; 1♀, Mushandike Sanctuary Masvingo, 9.-11.XII.1998, leg. Ma. Halada.

***Encopognathus rugosopunctatus* R. TURNER 1912 [1 ♀]**

Z i m b a b w e –E: 1 ♀, 40 km S Chipinge, Mt. Selinda, 13.XII.1998, leg. M. Halada.

***Encopognathus sudesticus* LECLERCQ 1977 [5 ♀ ♀, 3 ♂ ♂]**

M a l a y s i a : 5 ♀ ♀, 1 ♂, Ipoh, 5 km E Tanjong Rambutan, 3.-15.VI.2000, leg. M. Snizek.

T h a i l a n d : 1 ♂, Chiang Dao env., 21.V.-4. VI.1995, leg. M. Snizek; 1 ♂, Soppong (Pai), 28.V.-5 VII.1997, leg. M. Snizek.

***Encopognathus sungainus* LECLERCQ 1977 [1 ♂]**

B o r n e o : 1 ♂, Crocker range E, W Apin Apin, II.2000, leg. Snizek.

***Encopognathus* sp. [1 ♀]**

K e n y a –S E: 1 ♀, Voi, 10.XII.1999, leg. M. Snizek.

This female is similar to *Encopognathus rugosopunctatus*, it differs only by a metanotum with posterior lamella rised.

***Encopognathus (Encopognathus)* sp. [1 ♀]**

N a m i b i a : 1 ♀, Rundu, 29.I.1993, leg. J. Gusenleitner.

This female is characterized by the following: 7.0 mm, black; tibiae, pronotalobe, tegulae and Metanotum yellow; gaster black. Scutum, Scutellum and mesopleure coarse rugose-reticulate. Metanotum anteriorly rised! Tergites uniform punctate; sternite I charcteristically deformed.

***Enoplolindenus* ROHWER 1911 [3 ♀ ♀, 8 ♂ ♂]**

***Enoplolindenus pugnans* (F. SMITH 1873) [3 ♀ ♀, 8 ♂ ♂]**

A r g e n t i n a : 1 ♀, 1 ♂, Pronun Iamento, Prov. Entre Rios, XII.1963, leg. Walz; 1 ♀, 5 ♂ ♂, Pronun Iamento, Prov. Entre Rios, 1964, leg. Walz; 2 ♂ ♂, Pronuniamiento, Prov. Entre Rios, 1 II.1964, leg. Walz; 1 ♀, Pronun Iamiento, Prov. Entre Rios, 23.II.1964, leg. Walz.

***Lestica* BILLBERG 1820 [33 ♀ ♀, 45 ♂ ♂]**

***Lestica alata* (PANZER 1797) [6 ♀ ♀, 17 ♂ ♂]**

C z e c h R e p u b l i c : 1 ♀, Chotín, 22.VII.1962, leg. Padr.

M o n g o l i a : 1 ♀, 9 ♂ ♂, Ulanbatar, Tuul riv. vall., 12.VII.2003, leg. J. Halada; 1 ♀, 4 ♂ ♂, 90 km N Ulanbatar, Segnezer riv., 1450m, 6.-8.VII.2003, leg. J. Halada; 2 ♀ ♀, 4 ♂ ♂, 80 km N Ulanbatar, Mandal city, 9.VII.2003, leg. J. Halada.

U k r a i n e : 1 ♀, Crimea, Simpheropol, 26.VI.1993, leg. Gurko.

***Lestica camelus* (EVERSMANN 1849) [4 ♀ ♀]**

M o n g o l i a : 4 ♀ ♀, Ulanbatar, Tuul riv. vall., 12.VII.2003, leg. J. Halada.

***Lestica clypeata* (SCHREBER 1759) [21 ♀ ♀, 16 ♂ ♂]**

**B u l g a r i a** : 2 ♀ ♀, 1 ♂, Primorsko, 4.-6.VIII.1988, leg. Tymer.

**C r o a t i a** : 1 ♀, Istria, Laborika, 20.VII.2002, leg. Ma. Halada; 1 ♀, Istria W, 10 km E Rovinu, 16.VII.2002, leg. Ma. Halada.

**C z e c h R e p u b l i c** : 1 ♀, Moravia, 30 km S Brno, Popice, 12.VIII.2000, leg. Snizek; 2 ♀ ♀, Moravia S, Jecmeniste, Znojme, 24.V.2003, leg. Ma. Halada; 1 ♀, Bohemia, Budejovice-Srubeč, 4.VI.2002, leg. M. Halada; 1 ♀, Bohemia, Ceske Budejovice, 20.V.2002, leg. Ma. Halada; 1 ♀, Bohemia, C. Budejovice, 3.VII.2002, leg. M. Halada; 1 ♂, Bohemia, C. Krumlov, 22.VII.2000, leg. M. Halada; 1 ♂, Bohemia-mer., Lhenice env., 1.VI.2000, leg. Snizek; 1 ♂, Bohemia, Ceske Budejovice Srubeč, 10.VI.2000, leg. Ma. Halada.

**K a z a k h s t a n** : 1 ♀, sand desert 4 km N Bakanas, Lower Ili riv. valley, 12.VI.2000, leg. Zonstein; 1 ♀, 10 km E Djambul, 31.V.1994, leg. Ma. Halada.

**K i r g i z i y a** : 1 ♀, Mt. R. Ala-Archa riv., Ooru-Say, 1600m, VII.2000, leg. Gurko; 1 ♂, Tchu vall., 10 km NNE Telek, 550m, 43°10'N 74°03'E, 17.VI.2000, leg. Makogonova.

**S e r b i e** : 3 ♀ ♀, 1 ♂, NE Pozarevac, 20.VI.2002, leg. Snizek.

**S y r i a** – S: 4 ♂ ♂, Kafir, Suwayda, 21.VI.2000, leg. M. Halada.

**T u r k e y** : 1 ♀, Silifke, 26.V.2001, leg. Snizek; 1 ♀, 3 ♂ ♂, SE Elazig, Hazar Gölü, 29.VI.2000, leg. M. Halada; 1 ♂, Muradye, 2.VII.2000, leg. M. Halada; 1 ♂, 15 km W Refahye, W Erzincan, 1600m, 7.VII.2000, leg. M. Halada; 1 ♂, coast side, 70 km E Antalya, 29.VII.-7.VIII.2001, leg. Tymer.

**U k r a i n e** : 1 ♀, Crimea, Simferopol Anatra, VII.2000, leg. Gurko; 1 ♀, Crimea. Simpheropol, 9.VII.1999, leg. Gurko.

**U z b e k i s t a n** : 1 ♀, Navbakhor, 41.3°N 70.9°E, 30 km N Kokand, 13.V.1994, leg. J. Halada.

***Lestica eurypus* (KOHLE 1898) [2 ♂ ♂]**

**T u r k e y** – c.: 2 ♂ ♂, 20 km E Gurun, Mezikaran Gecidi, 10.VII.1997, leg. Ma. Halada.

Until now this species is known only from the holotype ♂ from Armenia!

***Lestica producticollis* (PACKARD 1866) [1 ♂]**

**U . S . A .** : 1 ♂, WA., Prosser, V.-VI.1994, leg. Stary.

***Lestica subterranea* (FABRICIUS 1755) [1 ♀, 4 ♂ ♂]**

**C z e c h R e p u b l i c** : 1 ♂, Bohemia-S, Novosedly n. Nez, Jemcina, 31.V.2002, leg. Krivan.

**K i r g i z i y a** : 1 ♂, Taldi-Bulag, 90 km E Talas, 5.VII.1992, leg. M. Halada; 1 ♀, Mt. 1800m, Ala Archa riv., Kashkasi, 25.VII.1999, leg. Gurko.

**T u r k e y** : 1 ♂, Burdur N Bucak 37°29'N 30°26'E, 24.V.1985, leg. Rausch; 1 ♂, Antalya, Bademli-Cec, 37°20'N 31°44'E, 1400m, 12.VI.1985, leg. Rausch.

***Lestica subterranea ochotica* (A. MORAWITZ 1866) [1 ♀, 3 ♂ ♂]**

**C h i n a** – c.: 1 ♂, Xiexian 34.8°N 111.6°E, Zhongtiao Shan mt., 22.-24.V.1996, leg. J. Halada.

**M o n g o l i a** : 1 ♀, 2 ♂ ♂, Ulanbatar, Tuul riv. vall., 12.VII.2003, leg. J. Halada.

***Lestica wollmanni* (KOHLE 1915) [1 ♂]**

**K i r g i z i y a** : 1 ♂, Tchu vall., 10 km NNE Telek, 550m, 43°10'N 74°03'E, 17.VI.2000, leg. Zonstein.

***Lestica* sp.**

B o r n e o : 1♂, Saban W Crocker Range E, W of Apin Apin, V.1999, leg. Snizek.

***Neodasyproctus* ARNOLD 1926 [1♀, 1♂]**

***Neodasyproctus basutorum* (R. TURNER) [1♀, 1♂]**

Z i m b a b w e : 1♀, Chimanimani Nature Park, 14.XII.1998, leg. S. Becvar, 1♂, 20 km W Gwanda, 6.XII.1998, leg. S. Becvar.

***Piyuma* PATE 1944. [4♀♀]**

***Piyuma bukitana* LECLERCQ 1995 [1♀]**

M a l a i s i a : 1♀, Borneo, Sebah, 15 km W Sandakan, 21.-III.-20.IV.1996, leg. J. Kadlec.

***Piyuma materna* LECLERCQ 1995 [1♀]**

L a o s - c . : 1♀, Khammouan prov., Ban Khoun Ngeun, 18°07'N 104°29'E, 250m, XI.2000, leg. E. Jendek.

***Piyuma prosopoides maklingi* (F. WILLIAMS 1928) [2♀♀]**

L a o s - c . : 1♀, Khammouan prov., Ban Khoun Ngeun, 18°07'N 104°29'E, 250m, XI.2000, leg. E. Jendek.

I n d i a - N E : 1♀, Assam, Nameri Nat. Park, Tezpur 60 km N, 150m, VIII.1997, leg. Afonin-Siniaev.

***Piyumoides* LECLERCQ 1963 [1♂]**

***Piyumoides* (?) sp.**

M a l a y s i a W : 1♂, Pahang, Cameron Highlands, Tana Rata, Gn. Jasar, 2.-3.III.1998, leg. S. Becvar.

This male is characterized by the following: 6.5 mm; scape, fore- and midleg largely yellow; collare, pronotallobe, scutellum anterior half and metanotum yellow; hindleg and abdomen brown. Upper frons distinctly margined in front by a transverse carina which is medianly interrupted by the frontal furrow; ocelli in nearly equilateral triangle; antennal scape carinate; antennal segments IV-VI enlarged, VI with obtuse tooth, VII distal with sharp tooth as long as the flagellomere is broad; anterior margin of clypeus subtriangular; medial longitudinal carina of clypeus reaching the anterior margin; occipital carina complete; papal formula 6 – 4 ; mandible bidentate without tooth on inner margin; pronotal collar evenly rounded anteriorly and laterally, as high as anterior part of scutum, smooth and broadly yellow, without median notch or mark; femur I distal distinctly enlarged, basitarsus I lightly enlarged; mesopleuron without precoxal carina but with weak ridge; propodeal enclosure enclosed by a furrow; abdomen subpedunculate, first tergite 3 × as long as broad at the end, tergite II incised basally.

***Podagritys* SPINOLA 1851 [7 ♀ ♀, 10 ♂ ♂]**

***Podagritys aemulans* (KOHLE 1905) [5 ♀ ♀, 5 ♂ ♂]**

Ecuador: 5 ♀ ♀, 5 ♂ ♂, Tungurahua prov., Banos, 1500m, 14.II.2002, leg. M. Halada.

***Podagritys gayi* SPINOLA 1851 [1 ♀, 3 ♂ ♂]**

Chile: 1 ♀, 1 ♂, Cautin Park National, Las Paraguas, 18.XI.1985, leg. L.E. Pena; 2 ♀ ♀, Coquimbo, Vicuna Elgui, 20.XI.1990, leg. L.E. Pena.

***Podagritys joergenseni* (BRÈTHES 1913) [1 ♀, 1 ♂]**

Argentina: 1 ♀, 1 ♂, Pronun Iamento, Prov. Entre Rios, 1964, leg. Walz.

***Podagritys paractus* LECLERCQ 1982 [1 ♂]**

Bolivia: 1 ♂, Chochabamba, Carrasco Biberia, 1650m, X.1963, leg. Walz.

***Rhopalum* STEPHENS 1829 [21 ♀ ♀, 84 ♂ ♂]**

***Rhopalum austriacum* (KOHLE 1899) [1 ♂]**

Algeria: 1 ♂, Djanet, 27.X.1975, leg. Hoffer.

***Rhopalum beaumonti* MOCZAR 1957 [4 ♀ ♀, 59 ♂ ♂]**

Turkey: 4 ♀ ♀, 58 ♂ ♂, Pr. Van, Van Gölü, 1720m, E Ercis, 9.VIII.1982, leg. Schacht; 1 ♂, Prov. Van, Van-See, 1700m, Ercis env., 3.VIII.1983, leg. Schacht.

***Rhopalum brevinodum* (SPINOLA 1851) [1 ♀]**

Argentina: 1 ♀, Pucara (Ter Neuquén), 15.VII.1953-15.I.1954, leg. S. Schajkovskoj.

***Rhopalum chinquense* LECLERCQ 1994 [2 ♀ ♀]**

Chile: 2 ♀ ♀, Las Trancas Nuble, Shemguilla, 13.-15.XII.1983, leg. Pena.

***Rhopalum clavipes* (LINNÉ 1758) [1 ♂]**

Czech Republic: 1 ♂, S-Bohemia, C. Krumlov, 22.VII.2000, leg. M. Halada.

***Rhopalum coarctatum* (SCOPOLI 1763) [1 ♂]**

Czech Republic: 1 ♂, S-Bohemia, C. Budejovice Srubec, 21.VI.2002, leg. M. Halada.

***Rhopalum deroanni* LECLERCQ 2002 [3 ♀ ♀, 5 ♂ ♂]**

Ecuador: 1 ♀, 5 ♂ ♂, Tungurahua prov., Banos, 1500m, 14.II.2002, leg. M. Halada; 1 ♀, Tungurahua prov., Banos, 25.II.2002, leg. M. Halada; 1 ♀, Napo prov., 8 km S Tena, Puerto Napo, 200m, 16.-22.II.2002, leg. Ma. Halada.

***Rhopalum gracile* WESMAEL 1852 [4 ♀ ♀, 1 ♂]**

Czech Republic: 1 ♀, S-Moravia, 30 km S Brno, Popice, 12.VIII.2000, leg. Snizek.

Kazakhstan: 1 ♀, 20 km SE Aksay env., 16.-19.VI.1992, leg. Deneš; 1 ♀, Dzambul env. (60 km), poust Mjunkum, Akil Tobe, 4.VI.1980, leg. Soldan.

Turkey: 1 ♀, 80 km SW Malatya Erkenek, 9.VII.1997, leg. Ma. Halada.

Uzbekistan: 1 ♂, Fergana env. (30 km), Kadamzaj, 21.-22.V.1980, leg. Padr.

***Rhopalum kuwayamai* TSUNEKI 1952 [1 ♀]**

China: 1 ♀, Shaanxi, Qinling mts., Xunyangba (6 km E), 1000-1300m, 23.V.-13.VI.1998, leg. I.H. Mashal.

***Rhopalum (Latrorhopalum)* sp. [1 ♀]**

China: 1 ♀, Yunnan prov., Heishui 35 km N Lijiang 27.13°N 100.19°E, 18.VI.-4.VII.1993, leg. S. Becvar.

This female is very similar to *Rhopalum (Latrorhopalum) shirozui* TSUNEKI 1965. It differs from this species in the anterior margin of clypeus with four teeth, the median teeth strongly risen. Head in profile with temple wider than eye, much wider than in *R. shirozui*. Black, only tibia I, pronotallobe and scape ventral yellow-whitish.

The following specimens of *Rhopalum* could not be named: China (1 ♂), Borneo (1 ♂), Laos (3 ♀ ♀), W-Malaysia (1 ♂) and Thailand (2 ♀ ♀, 13 ♂ ♂).

***Tracheliodes* A. MORAWITZ 1866 [58 ♀ ♀, 22 ♂ ♂]*****Tracheliodes curvitorsus* (HERRICH-SCHAEFFER 1841) [10 ♀ ♀, 1 ♂]**

Bulgaria: 1 ♀, Trakia, Proslav, 10.VII.1997, leg. Zaykov.

Bulgaria – SE: 3 ♀ ♀, Neseber, 28.VI.1982, leg. Kocourek.

Czech Republic: 4 ♀ ♀, 1 ♂, Moravia, Cejc, VI.1973, leg. M. Kocourek; 1 ♀, Moravia, Ladna, VII.1986, leg. Kocourek.

Greece: 1 ♀, Phthiotis, S Timfristos, 38°55'N 21°51'E, 750m, 22.VII.1990, leg. H. Rausch.

***Tracheliodes quinquenotatus* (JURINE 1807) [45 ♀ ♀, 21 ♂ ♂]**

Italy: 4 ♀ ♀, 1 ♂, Sardegna E, Lanusei env., 29.VI.2000, leg. J. Halada; 4 ♀ ♀, 2 ♂ ♂, Sicilia SE, 35 km SW Ragusa beach, 18.-22.VI.2002, leg. J. Halada.

Morocco: 7 ♀ ♀, 2 ♂ ♂, Oued Massa Tiznit, 8.V.2003, leg. M. Halada; 5 ♀ ♀, 8 ♂ ♂, Taroudant, 22.IV.1990, leg. M. Halada; 1 ♀, Taroudant env., 11.V.2003, leg. M. Halada; 9 ♀ ♀, 1 ♂, 30 km E Taroudant, 27.IV.1995, leg. Mi. Halada; 3 ♀ ♀, Essaouira, 9.V.1995, leg. Mi. Halada; 2 ♀ ♀, Tamri, 70 km N Agadir, leg. Mi. Halada; 3 ♀ ♀, 15 km N Martil Cobo Nagro, 20.V.1997, leg. J. Halada; 2 ♀ ♀, Ain-Benimathar, 18.V.1995, leg. Mi. Halada; 1 ♀, 5 ♂ ♂, 30 km N Zagora, 15.V.1997, leg. J. Halada; 1 ♂, Tiznit Oued Massa, 8.V.2003, leg. Snizek.

Spain: 1 ♀, 20 km N Almeria, 3.V.2003, leg. M. Halada; 1 ♀, 1 ♂, Andalucia, 50 km W Almera Berja, 21.+28.IV.2003, leg. J. Halada.

Tunisia: 1 ♀, 20 km W Sousse, 20.IV.2001, leg. M. Halada.

Turkey: 1 ♀, 30 km E Malatya Kale, 27.VI.2000, leg. M. Halada.

***Tracheliodes varus* (PANZER 1799) [3 ♀ ♀]**

B u l g a r i a : 1 ♀, Primorsko, VII.1979, leg. A. Hoffer.

C z e c h R e p u b l i c : 1 ♀, Moravia, Ladna, VII.1986, leg. Kocourek.

S l o v a k i a : 1 ♀, VII.1973, leg. Harmanek, ex coll. Kocourek.

***Williamsita* PATE 1947 [1 ♀]**

***Williamsita smithiensis* LECLERCQ 1954 [1 ♀]**

A u s t r a l i a : 1 ♀, Victoria, Mt. Hotham, ex coll. Kocourek.

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**Zusammenfassung**

Folgende Gattungen der Unterfamilie Crabroninae wurden untersucht: *Crabro* FABRICIUS 1775, *Ectemnius* DAHLBOM 1845, *Encopognathus* KOHL 1897, *Enoplolindenus* ROHWER 1911, *Lestica* BILLBERG 1820, *Neodasyproctus* ARNOLD 1926, *Piyuma* PATE 1944, *Piyumoides* LECLERCQ 1963, *Podagritus* SPINOLA 1851, *Rhopalum* STEPHENS 1829, *Tracheliodes* A. MORAWITZ 1866 und *Williamsita* PATE 1947. Alle Informationen über Fundorte werden gegeben, jedoch von häufig gefundenen Arten nur die Fundstellen außerhalb von Zentraleuropa.

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